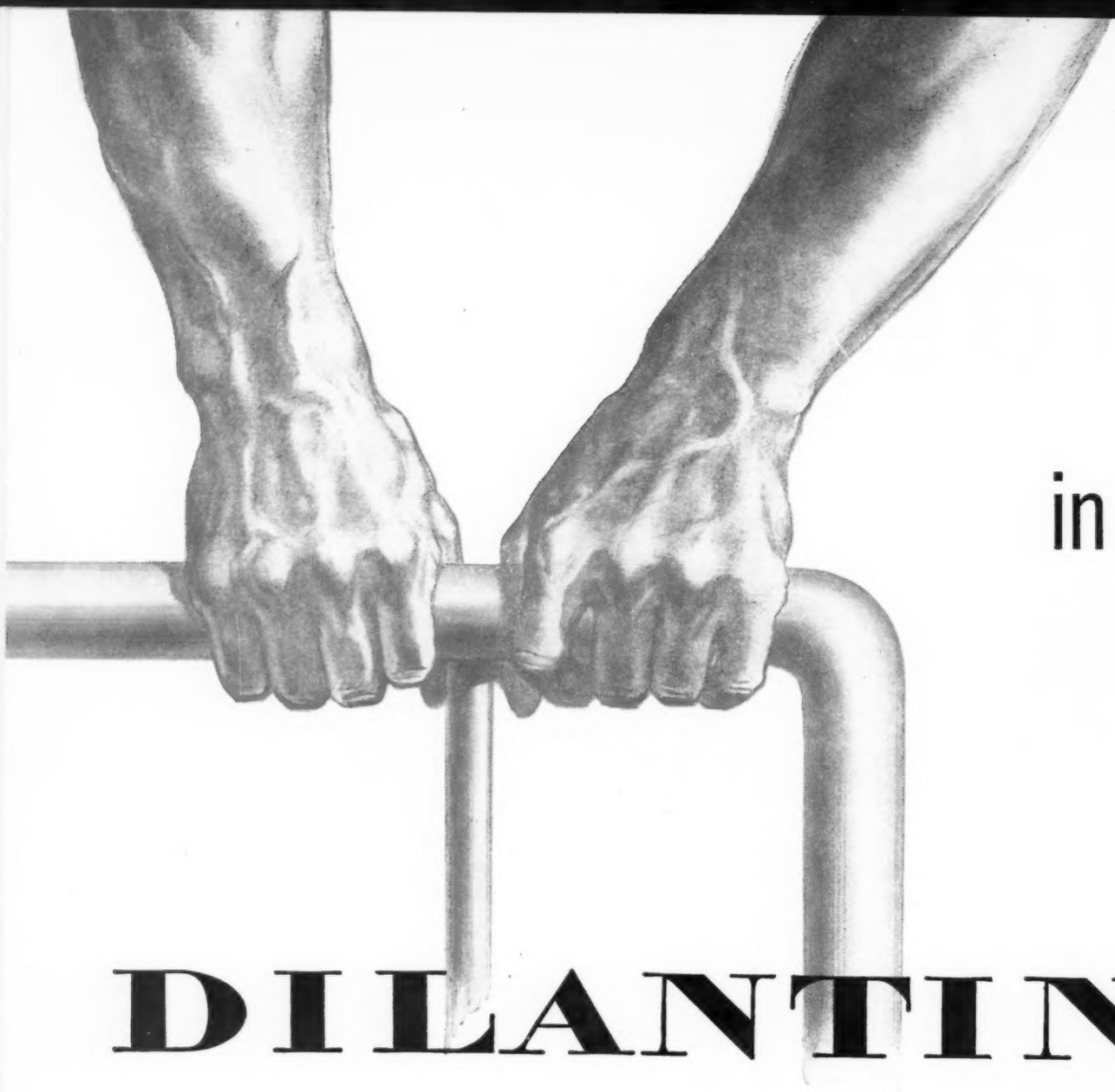
The Journal

of the Michigan State Medical Society

Volume 51 | February, 1952 | Number 2

(See Page 164)



in the

DILANTIN®

"...little depression

...strong opposition to major convulsions."

PARKE, DAVIS & COMPANY

THE JOURNAL
of the Michigan State Medical Society

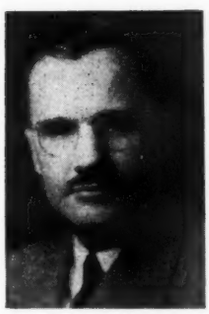
VOLUME 51 FEBRUARY, 1952 NUMBER 2

Contributors to This Issue

BRUCE C. LOCKWOOD, M.D

JOHN MARTIN, M.D.

H. M. NELSON, M.D.



F. H. TOP, M.D.

C. E. UMPHREY, M.D.

Table of Contents

THE JOURNAL
of the Michigan State Medical Society

VOLUME 51 FEBRUARY, 1952 NUMBER 2

Office of Publication
2642 University Avenue
Saint Paul 4, Minnesota

Editor
WILFRID HAUGHEY, M.D.
610 Post Bldg., Battle Creek, Michigan

Secretary and Business Manager of THE JOURNAL
L. FERNALD FOSTER, M.D.
Thorne Bldg., 919 Washington Ave.
Bay City, Michigan

Executive Director
WM. J. BURNS, LL.B.
606 Townsend Street, Lansing 15, Michigan

All communications relative to exchanges, books for review, manuscripts, should be addressed to Wilfrid Haughey M.D., 610 Post Bldg., Battle Creek, Michigan.

All communications regarding advertising and subscription should be addressed to Wm. J. Burns, 2642 University Avenue, Saint Paul 4, Minnesota, or 606 Townsend Street, Lansing 15, Michigan. Telephone 57125.

Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 4, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $5.00; single copies, 50 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

PRINTED IN U.S.A.

OFFICERS OF THE SOCIETY
1951-52

President.....OTTO O. BECK, M.D.....Birmingham
President-Elect.....R. J. HUBBELL, M.D.....Kalamazoo
Secretary.....L. FERNALD FOSTER, M.D.....Bay City
Treasurer.....A. S. BRUNK, M.D.....Detroit
Speaker.....R. H. BAKER, M.D.....Pontiac
Vice Speaker.....J. E. LIVESAY, M.D.....Flint
Editor.....WILFRID HAUGHEY, M.D.....Battle Creek

THE COUNCIL

WILLIAM BROMME, M.D., Chairman, Detroit
L. W. HULL, M.D., Vice Chairman, Detroit
L. FERNALD FOSTER, M.D., Secretary, Bay City

	District		Term Expires
L. W. HULL, M.D.	1st	Detroit	1956
R. S. BREAKEY, M.D.	2nd	Lansing	1955
G. W. SLAGLE, M.D.	3rd	Battle Creek	1955
RALPH W. SHOOK, M.D.	4th	Kalamazoo	1956
J. D. MILLER, M.D.	5th	Grand Rapids	1956
H. H. HISCOCK, M.D.	6th	Flint	1956
H. B. ZEMMER, M.D.	7th	Lapeer	1952
L. C. HARVIE, M.D.	8th	Saginaw	1952
G. B. SALTONSTALL, M.D.	9th	Charlevoix	1952
F. H. DRUMMOND, M.D.	10th	Kawkawlin	1952
C. A. PAUKSTIS, M.D.	11th	Ludington	1953
A. H. MILLER, M.D.	12th	Gladstone	1953
W. S. JONES, M.D.	13th	Menominee	1953
B. M. HARRIS, M.D.	14th	Ypsilanti	1954
D. BRUCE WILEY, M.D.	15th	Utica	1955
W. D. BARRETT, M.D.	16th	Detroit	1955
W. B. HARM, M.D.	17th	Detroit	1953
WILLIAM BROMME, M.D.	18th	Detroit	1954

OTTO O. BECK, M.D.	President	Birmingham
R. J. HUBBELL, M.D.	President-Elect	Kalamazoo
R. H. BAKER, M.D.	Speaker	Pontiac
L. FERNALD FOSTER, M.D.	Secretary	Bay City
A. S. BRUNK, M.D.	Treasurer	Detroit
C. E. UMPHREY, M.D.	Immediate Past President	Detroit

EXECUTIVE COMMITTEE OF THE COUNCIL

WILLIAM BROMME, M.D.....Chairman
L. W. HULL, M.D.....Vice Chairman
F. H. DRUMMOND, M.D.....Chairman, Publication Committee
W. S. JONES, M.D.....Chairman, Finance Committee
D. BRUCE WILEY, M.D.....Chairman, County Societies Committee
R. H. BAKER, M.D.....Speaker, House of Delegates
OTTO O. BECK, M.D.....President
R. J. HUBBELL, M.D.....President-Elect
L. FERNALD FOSTER, M.D.....Secretary

SECTION OFFICERS

Medicine
D. I. Sugar, M.D.....Detroit
Chairman
D. R. Boyd, M.D.....Muskegon
Secretary

Surgery
F. P. Husted, M.D.....Bay City
Chairman
J. M. Wellman, M.D.....Lansing
Secretary

Gynecology and Obstetrics
L. C. Bosch, M.D.....Grand Rapids
Chairman
J. P. Ottoway, M.D.....Detroit
Secretary

Gastroenterology and Proctology
E. F. Sladek, M.D.....Traverse City
Chairman
R. L. Fitts, M.D.....Grand Rapids
Secretary

Radiology, Pathology, Anesthesiology
A. B. Stearns, M.D.....Detroit 1
Chairman (Anes.)
W. A. Stryker, M.D.....Wyandotte
Vice Chairman (Path.)
F. K. Wietersen, M.D.....Birmingham
Secretary (Rad.)

General Practice
E. M. Smith, M.D.....Grand Rapids
Chairman
C. J. Williams, M.D.....Detroit
Secretary

Ophthalmology and Otolaryngology
C. G. Wencke, M.D.....Battle Creek
Chairman (Oto.)
L. E. McCullough, M.D.....Detroit
Co-Chairman (Oph.)
F. A. Lamberson, M.D.....Detroit
Secretary (Oto.)
L. L. Loder, M.D.....Muskegon
Co-Secretary (Oph.)

Pediatrics
H. L. French, M.D.....Lansing
Chairman
P. S. Bradshaw, M.D.....Muskegon
Secretary

Urology
R. A. Burhans, M.D.....Lansing
Chairman
William Bromme, M.D.....Detroit
Secretary

Public Health and Preventive Medicine
M. R. French, M.D.....Coldwater
Chairman
J. G. Molner, M.D. Detroit
Secretary

Nervous and Mental Diseases
P. N. Brown, M.D.....Northville
Chairman
T. V. Hoagland, M.D.....Detroit
Secretary

Dermatology and Syphilology
J. R. Delaney, M.D.....Detroit
Chairman
C. J. Courville, M.D.....Detroit
Secretary

DELEGATES TO A. M. A.

Delegates
W. D. Barrett, M.D., Detroit.....1952
W. H. Huron, M.D., Iron Mountain 1952
R. L. Novy, M.D., Detroit.....1952
R. A. Johnson, M.D., Detroit.....1953
W. A. Hyland, M.D., Grand Rapids 1953
J. S. DeTar, M.D., Milan.....1953

Alternates
R. H. Denham, M.D., Grand Rapids 1952
C. I. Owen, M.D., Detroit.....1952
E. F. Sladek, M.D., Traverse City 1953
E. D. Spalding, M.D., Detroit.....1953
W. W. Babcock, M.D., Detroit.....1953
E. C. Texter, M.D., Detroit.....1953

MSMS Committee Personnel

1951-52

Committee on Rheumatic Fever Control

Frank Van Schoick, M.D., *Chairman*....419 W. High Street, Jackson
Mr. P. C. Angove.....449 W. Ferry, Detroit
P. S. Barker, M.D.....University Hospital, Ann Arbor
W. B. Cooksey, M.D.....62 W. Kirby, Detroit
Carleton Dean, M.D.....252 Hollister Building, Lansing
Douglas Donald, M.D.....7815 E. Jefferson, Detroit
Thomas Francis, Jr., M.D.....
School of Public Health, University of Michigan, Ann Arbor
S. T. Harris, M.D. .....220 Pearl Street, Ypsilanti
H. S. Heersma, M.D.....252 E. Lovell, Kalamazoo
F. D. Johnson, M.D.....312 Paterson Building, Flint
J. A. Johnston, M.D.....2799 W. Grand Blvd., Detroit
E. C. Long, M.D.....2626 Rochester, Detroit
C. J. Poppen, M.D.....Mich. Dept. of Health, Lansing
L. Paul Ralph, M.D.....402 Metz Building, Grand Rapids
Mr. Emmet Richards.....Alpena
H. H. Riecker, M.D.....St. Joseph's Mercy Hospital,, Ann Arbor
Saul Rosenzweig, M.D..... 2114 David Broderick Tower, Detroit
D. S. Smith, M.D.....824 Riker Building, Pontiac
Roy D. Tupper, M.D.....15101 W. 7 Mile Road, Detroit
Bertram Zheutlin, M.D.....158 Capital Avenue, N.E., Battle Creek
L. Fernald Foster, M.D., *Secretary*.....
919 Washington Avenue, Bay City
Leon DeVel, M.D., *Co-ordinator*.....
739 Plymouth Blvd., S.E., Grand Rapids

Child Welfare Committee

R. J. Mason, M.D., *Chairman*.....
308 N. Woodward Avenue, Birmingham
R. J. Albi, M.D.....Boyne City
G. E. Anthony, M.D. .....1015 Detroit Street, Flint
W. N. Braley, M.D.....12897 Woodward Avenue, Detroit
G. B. Corneliuson, M.D.....Mich. Dept. of Health, Lansing
Carleton Dean, M.D.....458 Hollister Bldg., Lansing
J. B. Hassberger, M.D.....316 Wabeek Bldg., Birmingham
John L. Law, M.D.....302 S. State Street, Ann Arbor
Clarice McDougall, M.D.....310 E. Fulton Street, Grand Rapids
W. S. Nolting,, M.D.....16840 E. Warren, Detroit
A. L. Richardson, M.D.....651 Fisher Bldg., Detroit
R. S. Simpson, M.D.....1507 Wolverine Tower, Battle Creek
L. P. Sonda, M.D.....552 David Whitney Bldg., Detroit

Sub-Committee on Hearing Defects

O. B. McGillicuddy, M.D., *Chairman*.....
1816 Olds Tower Bldg., Lansing
R. H. Criswell, M.D.....407 Phoenix Bldg., Bay City
Ralph G. Ferris, M.D.....205 Hanna Bldg., Birmingham
M. H. Pike, M.D.....209 Reinhart Bldg., Midland

Sub-Committee of Ophthalmologists

Don Marshall, M.D.....252 E. Lovell Street, Kalamazoo

Maternal Health Committee

H. A. Pearse, M.D., *Chairman*.....852 Fisher Bldg., Detroit 2
G. M. Byington, M.D.....1151 Taylor Avenue, Detroit 2
A. M. Campbell, M.D.....
Oakwood Manor, 345 Cherry Street, S.E., Grand Rapids
A. L. Foley, M.D.....Rogers City
Francis Jones, Jr., M.D.....716 Olds Tower Bldg., Lansing
H. W. Longyear, M.D.....706 Maccabees Bldg., Detroit 2
S. T. Lowe, M.D. .....1009 Security Bank Bldg., Battle Creek
L. C. Spademan, M.D. .....1013 David Whitney Bldg., Detroit 26
P. E. Sutton, M.D.....629 Washington Square Bldg., Royal Oak
D. W. Thorup, M.D. .....610 Fidelity Bldg., Benton Harbor
C. E. Toshach, M.D. .....330 S. Jefferson, Saginaw
Kathryn O. Weburg, M.D.....Petoskey
H. R. Williams, M.D.....200 N. Ingalls Street, Ann Arbor
P. W. Willits, M.D.....Blodgett Medical Bldg., Grand Rapids

Mental Hygiene Committee

R. W. Waggoner, M.D., *Chairman*....University Hospital, Ann Arbor
H. E. August, M.D.....1242 Maccabees Bldg., Detroit 2
C. D. Benson, M.D.....1515 David Whitney Bldg., Detroit
I. C. Berlien, M.D.....1753 Union Guardian Bldg., Detroit 26
F. P. Currier, M.D.....626 Medical Arts Bldg., Grand Rapids
W. W. Dickerson, M.D.....Caro State Hospital, Caro
J. M. Dorsey, M.D.....65 Moss, Highland Park
G. C. Fink, M.D.....411 N. Ingalls Street, Ann Arbor
E. M. Gates, M.D.....206 Riker Bldg., Pontiac
T. J. Heldt, M.D.....2799 W. Grand Blvd., Detroit
L. E. Himler, M.D.....Mercywood Hospital, Ann Arbor
M. H. Hoffman, M.D.....1311 David Whitney Bldg., Detroit
C. G. Jennings, M.D.....7815 E. Jefferson, Detroit
R. F. Kernkamp, M.D.....1204 David Broderick Tower, Detroit
Morris Marks, M.D.....12739 Puritan, Detroit 27
F. O. Meister, M.D.....1007 Security Bank Bldg., Battle Creek
Sidney Miller, M.D.....391 Hamilton Avenue, Birmingham
O. R. Yoder, M.D.....Ypsilanti State Hospital, Ypsilanti
H. A. Luce, M.D., *Advisor*.....629 David Whitney Bldg., Detroit

Iodized Salt Committee

B. E. Brush, M.D., *Chairman*.....2799 W. Grand Blvd., Detroit 2
H. A. Towsley, M.D., *Vice Chairman*....University Hosp., Ann Arbor
L. J. Bailey, M.D.....620 Vinewood, Birmingham
Leon M. Bogart, M.D.....1008 Genesee Bank Bldg., Flint
L. W. Gerstner, M.D.....420 John Street, Kalamazoo
C. F. Lemley, M.D.....533 Fisher Bldg., Detroit 2
R. C. Moehlig, M.D.....964 Fisher Bldg., Detroit 2
R. L. Waggoner, M.D.....St. Louis

Geriatrics Committee

A. H. Price, M.D., *Chairman*.....62 W. Kirby, Detroit
F. A. Weiser, M.D., *Vice Chairman*.....4162 John R., Detroit
W. M. LeFevre, M.D., *2nd Vice Chairman*.....
289 W. Western Avenue, Muskegon
R. M. Athay, M.D.....Wayne County General Hospital, Eloise
F. W. Baske, M.D.....923 Maxine Street, Flint
J. R. Brink, M.D.....308 Metz Building, Grand Rapids
R. A. Johnson, M.D.....7815 E. Jefferson, Detroit
J. J. Lightbody, M.D.....501 David Whitney Bldg., Detroit
Mark Marshall, M.D.....St. Joseph's Mercy Hospital, Ann Arbor
H. H. Riecker, M.D.....St. Joseph's Mercy Hospital, Ann Arbor
D. R. Smith, M.D.....Iron Mountain
F. C. Swartz, M.D.....215 N. Walnut Street, Lansing
G. C. Thosteson, M.D.....1139 David Whitney Bldg., Detroit 26
S. C. Wiersma, M.D.....Hackley Union Bank Bldg., Muskegon
W. J. Wilson, Jr., M.D.....749 David Whitney Bldg., Detroit 26

Sub-Committee to Study Problems of Caring for the Aged

F. A. Weiser, M.D., *Chairman*.....4162 John R. St., Detroit
Mark Marshall, M.D.....St. Joseph's Mercy Hospital, Ann Arbor
H. H. Riecker, M.D.....St. Joseph's Mercy Hospital, Ann Arbor
D. R. Smith, M.D.....Iron Mountain

Sub-Committee on Diabetes Control

W. M. LeFevre, M.D., *Chairman*....289 W. Western Ave., Muskegon
F. W. Baske, M.D.....923 Maxine St., Flint
G. C. Thosteson, M.D.....1139 David Whitney Bldg., Detroit
S. C. Wiersma, M.D.....Hackley Union Bank Bldg., Muskegon

Scientific Radio Committee

J. M. Sheldon, M.D., *Chairman*.....
University Hospital, Dept. P.G. Medicine, Ann Arbor
C. B. Beeman, M.D.....509 Kendall Professional Bldg., Grand Rapids
F. J. Kemp, M.D.....1115 People's State Bank Bldg., Pontiac
R. J. Noer, M.D.....1512 St. Antoine, Detroit
K. L. Swift, M.D.....869 Fisher Bldg., Detroit
K. W. Toothaker, M.D.....320 Townsend Street, Lansing
E. C. Vonder Heide, M.D.....17190 Strathmore, Detroit

Tuberculosis Control Committee

J. W. Towey, M.D., *Chairman*.....Powers
J. L. Egle, M.D.....Northern Michigan TB San.,, Gaylord
J. F. Failing, M.D.....502 Metz Bldg., Grand Rapids
Cameron Haight, M.D.....1313 E. Ann Street, Ann Arbor
A. E. Heustis, M.D.....Michigan Dept. of Health, Lansing
V. C. Johnson, M.D.....10 Peterboro, Detroit 1
C. E. Lemmon, M.D.....1337 David Whitney Bldg., Detroit 26
G. T. McKean, M.D.....1515 David Whitney Bldg., Detroit
C. P. Mehas, M.D.....Oakland County Sanatorium, Pontiac
C. J. Stringer, M.D.....Ingham County Sanatorium, Lansing

Committee on Infectious Diarrhea

O. D. Stryker, M.D., *Chairman*.....
Macomb Co. Health Dept., Mt. Clemens
Bernard Bernbaum, M.D.....922 Maccabees Bldg., Detroit
G. D. Cummings, M.D.....State Dept. of Health, Lansing
W. L. Harrigan, M.D.....Mt. Pleasant
R. M. Kempton, M.D.....333 S. Jefferson, Saginaw
J. H. Lewis, M.D.....2956 Biddle, Wyandotte
K. W. McLeod, M.D.....304 Paterson Bldg., Flint
S. W. Miller, M.D.....Alma
J. G. Molner, M.D.....334 Bates, Detroit 26
I. W. Sander, M.D.....5050 Cass Ave., Detroit 2
R. K. Whiteley, M.D.....541 David Whitney Bldg., Detroit 26

(Continued on Page 152)

All Children Can Benefit from *this* Protective Hot Drink at Breakfast

In its widely distributed leaflet No. 268, "Eat a Good Breakfast," the U. S. Dept. of Agriculture states: "Summer or winter, there's something hot, as a rule, in a good breakfast.... Something hot is cheering and tones up the whole digestive route."

The problem of encouraging children to eat an adequately protective breakfast finds easier solution when Ovaltine in hot milk is recommended as a breakfast beverage. Many children clamor for a hot drink at the morning meal, and hot Ovaltine is the right kind of drink to recommend.

A cup of hot Ovaltine makes an excellent contribution of virtually all essential nutrients, adding substantially to the nutritional start for the day. It also serves in a gustatory capacity by enhancing the appeal of breakfast and making other foods more inviting.

The nutrient contribution made by a cup of Ovaltine is apparent from the table below. Note the wealth of essentials added to the nutritional intake by making the simple recommendation of adding a cup of hot Ovaltine to the child's breakfast.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILLINOIS

Ovaltine

Here are the nutrients that a cupful of hot Ovaltine, made of ½ oz. of Ovaltine and 8 fl. oz. of whole milk,*provides:

PROTEIN	10.5 Gm.	IRON	4 mg.	NIACIN	2.3 mg.
FAT	10.5 Gm.	COPPER	0.2 mg.	VITAMIN C	10 mg.
CARBOHYDRATE	22 Gm.	VITAMIN A	1000 I.U.	VITAMIN D	140 I.U.
CALCIUM	370 mg.	VITAMIN B_1	0.39 mg.	CALORIES	225
PHOSPHORUS	315 mg.	RIBOFLAVIN	0.7 mg.		

*Based on average reported values for milk.

(Continued from Page 150)

Cancer Control Committee

Horace Wray Porter, M.D., *Chairman*.....505 Wildwood, Jackson
H. M. Bishop, M.D.....515 S. Jefferson, Saginaw
M. R. Burnell, M.D.....General Motors Building, Detroit
D. C. Burns, M.D.....314½ Howard St., Petoskey
L. A. Campbell, M.D.....405 Peoples Bldg., Saginaw
E. I. Carr, M.D.....300 W. Ottawa, Lansing
R. C. Connelly, M.D.....1645 David Whitney Bldg., Detroit
M. A. Darling, M.D.....673 Fisher Bldg., Detroit
H. B. Fenech, M.D.....324 Prof. Bldg., Detroit
L. E. Holly, M.D.....876 N. Second, Muskegon
W. A. Hyland, M.D.....Metz Bldg., Grand Rapids
C. H. Keene, M.D.....2120 Wellingford Road, Ann Arbor
E. C. Long, M.D.....127 E. Front St., Monroe
B. E. Luck, D.D.S.....1512 Olds Tower, Lansing
H. F. Mattson, M.D.....Broad St., Hillsdale
C. C. McCormick, M.D.....222 Shaefer Bldg., Dearborn
A. B. McGraw, M.D.....2799 W. Grand Blvd., Detroit
H. L. Miller, M.D.....617 Wash. Square Bldg., Royal Oak
J. D. Monroe, M.D.....Oakland Co. Health Dept., Pontiac
H. M. Nelson, M.D.....1067 Fisher Bldg., Detroit
H. M. Pollard, M.D.....1313 E. Ann St., Ann Arbor
C. J. Poppen, M.D.....Mich. Dept. of Health, Lansing
H. R. Prentice, M.D.....458 W. South St., Kalamazoo
H. L. Sigler, M.D.....Howell
D. R. Smith, M.D.....Iron Mt.
J. C. Volderauer, M.D.....458 W. South St., Kalamazoo
N. F. Miller, M.D., Advisor.....1313 E. Ann St., Ann Arbor
F. L. Rector, M.D., Secretary.....428 Wildwood Ave., Jackson

Public Relations Committee

L. W. Hull, M.D., *Chairman*....1701 David Whitney Bldg., Detroit
G. T. Aitken, M.D.....Kendall Professional Building, Grand Rapids
J. F. Beer, M.D.....S. Riverside Drive, St. Clair
E. W. Blanchard, M.D.....Deckerville
H. R. Bodine, M.D.....1506 Security Bank Building, Battle Creek
William Bromme, M.D.....10 Peterboro, Detroit 1
J. W. Christie, M.D.....1301 Pontiac State Bank Building, Pontiac
T. S. Conover, M.D.....420 Genesee Bank Building, Flint
E H. Fenton, M.D.....15125 Grand River Avenue, Detroit
L. F. Foster, M.D.....919 Washington Avenue, Bay City
R. A. Frary, M.D.....423 E. Elm Street, Monroe
W. G. Gamble, Jr., M.D.....2010 Fifth Avenue, Bay City
L. J. Gravelle, M.D.....1101 David Whitney Building, Detroit 26
A. B. Gwinn, M.D.....City Bank Bldg., Hastings
S. W. Hartwell, M.D.....452 W. Western Avenue, Muskegon
L. T. Henderson, M.D.....13038 E. Jefferson, Detroit 15
W. J. Herrington, M.D.....Bad Axe
H. C. Hill, M.D.....Howell
A. B. Hodgman, M.D.....1029½ W. North Street, Kalamazoo
K. P. Hodges, M.D.....1116 Olds Tower Bldg., Lansing
F. P. Husted, M.D.....302 Davidson Building, Bay City
K. H. Johnson, M.D.....1116 Olds Tower Bldg., Lansing
R. A. Johnson, M.D.....7815 E. Jefferson, Detroit 14
F. J. Kemp, M.D.....1115 Peoples State Bank Building, Pontiac
R. C. Kingswood, M.D.....90 E. Warren, Detroit 1
J. E. Livesay, M.D.....621 Mott Foundation Building, Flint
J. E. Manning, M.D.....112 N. Michigan Avenue, Saginaw
J. J. McCann, M.D.....Ionia Co. National Bank Bldg., Ionia
O. B. McGillicuddy, M.D.....1816 Olds Tower Building, Lansing
H. J. Meier, M.D.....87 W. Pearl Street, Coldwater
E. B. Miller, M.D.....425 River Street, Manistee
B. T. Montgomery, M.D.....309 Ashmun Street, Sault Ste. Marie
E. S. Oldham, M.D.....Breckenridge
H. F. Osterhagen, M.D.....West Bay Shore Road, Traverse City
C. A. Payne, M.D.....Blodgett Memorial Hospital, Grand Rapids
R. C. Peckham, M.D.....Gaylord
J. R. Pedden, M.D.....1144 Madison S.E., Grand Rapids
A. C. Pfeifer, M.D.....Mt. Morris
L. A. Pratt, M.D.....3919 John R. Street, Detroit
W. Z. Rundles, M.D.....304 First National Building, Flint
R. F. Salot, M.D.....713 Monitor Leader Building, Mt. Clemens
G. B. Saltonstall, M.D.....112 Clinton Street, Charlevoix
A. E. Schiller, M.D.....2008-10 David Broderick Tower, Detroit 26
A. H. Steele, M.D.....Paw Paw
C. G. Steinke, M.D.....517 Stephenson Avenue, Iron Mountain
R. W. Teed, M.D.....215 S. Main Street, Ann Arbor
Arch Walls, M.D.....17201 W. McNichols Road, Detroit 19
C. L. Weston, M.D.....1306 N. Washington Street. Owosso
A. H. Whittaker, M.D.....1427 E. Jefferson, Detroit 7
T. P. Wickliffe, M.D.....1167 Calumet Avenue, Calumet
G. B. Wickstrom, M.D.....Madigan Building, Munsing
D. B. Wiley, M.D.....4692 Van Dyke, Utica
J. A. Witter, M.D.....344 Glendale, Detroit 3
V. M. Zerbi, M.D.....1711 Stamford, Willow Run Village

Sub-Committee on Newspapers

C. L. Weston, M.D., *Chairman*....1306 N. Washington Street, Owosso
G. T. Aitken, M.D.....Kendall Professional Building, Grand Rapids
William Bromme, M.D.....10 Peterboro, Detroit 1
R. A. Johnson, M.D.....7815 E. Jefferson, Detroit 14
H. J. Meier, M.D.....87 W. Pearl Street, Coldwater
A. C. Pfeifer, M.D.....Mt. Morris

Sub-Committee on Speakers Bureau

J. A. Witter, M.D., *Chairman*.....344 Glendale, Detroit 3
F. P. Husted, M.D.....302 Davidson Building, Bay City
M. H. Manning, M.D.....824 E. State Fair, Detroit 3
H. F. Osterhagen, M.D.....West Bay Shore Road, Traverse City
J. R. Pedden, M.D.....1144 Madison, Grand Rapids

Sub-Committee on Cinema

Arch Walls, M.D., *Chairman*....17201 W. McNichols Road, Detroit 19
R. J. Noer, M.D.....1512 St. Antoine, Detroit
R. F. Salot, M.D.....713 Monitor Leader Building, Mt. Clemens
A. E. Schiller, M.D.....2008-10 David Broderick Tower, Detroit 26
Wayne Whitaker, Ph.D.....Univ. of Mich., Ann Arbor

Sub-Committee on Public Relations Publications

K. H. Johnson, M.D., *Chairman*..1116 Olds Tower Building, Lansing
L. F. Foster, M.D.....919 Washington, Bay City
L. T. Henderson, M.D.....13038 E. Jeffferson, Detroit 15
J. E. Livesay, M.D.....621 Mott Foundation Building, Flint

Sub-Committee on Education Programs in Schools and Universities

D. B. Wiley, M.D., *Chairman*.....4692 Van Dyke, Utica
J. J. McCann, M.D.....Ionia Co. National Bank Bldg., Ionia
J. W. Christie, M.D.....1301 Pontiac State Bank Bldg., Pontiac
E. B. Miller, M.D.....425 River Street, Manistee
A. H. Steele, M.D.....Paw Paw

Sub-Committee on Radio

C. A. Payne, M.D., *Chairman*....Blodgett Mem. Hosp., Grand Rapids
G. T. Aitken, M.D.....Kendall Professional Building, Grand Rapids
W. G. Gamble, Jr., M.D.....2010 Fifth Avenue, Bay City
W. J. Herrington, M.D.....Bad Axe
R. W. Teed, M.D.....215 S. Main Street, Ann Arbor

Sub-Committee on Television

R. C. Kingswood, M.D., Chairman.....90 E. Warren, Detroit
E. C. Long, M.D.....2626 Rochester, Detroit
R. A. Frary, M.D.....423 E. Elm, Monroe

Mediation Committee

W. Z. Rundles, M.D., *Chairman*....304 First National Building, Flint
R. J. Hubbell, M.D.....252 E. Lovell Street, Kalamazoo
L. R. Leader, M.D.....1129 David Whitney Building, Detroit 26
E. W. Meredith, M.D.....1102 Sixth Street, Port Huron
E. T. Morden, M.D.....109 E. Maumee, Adrian
J. R. Ralyea, M.D.....Paw Paw
R. W. Teed, M.D.....215 S. Main Street, Ann Arbor
E. H. Terwilliger, M.D.....South Haven
C. F. Vale, M.D.....1306 David Whitney Building, Detroit
Ralph Wadley, M.D.....335 Seymour, Lansing

Committee on Venereal Disease Control

L. W. Shaffer, M.D., *Chairman*.....3852 Bishop Road, Detroit
R. S. Breakey, M.D.....1211 Bank of Lansing Bldg., Lansing
H. B. Bennett, M.D.....944 Maccabees Bldg., Detroit 2
J. A. Cowan, M.D.....Mich. Dept. of Health, Lansing
R. C. Crowell, M.D.....16 Peoples State Bank Bldg., St. Joseph
A. C. Curtis, M.D.....511 First National Bldg., Ann Arbor
L. O. Geib, M.D.....3528 Van Dyke, Detroit 14
E. A. Hand, M.D.....211 Bearinger Bldg., Saginaw
Ruth Herrick, M.D.....303 Medical Arts Bldg., Grand Rapids
R. H. Holmes, M.D.....316 Hackley Union Bldg., Muskegon
Benjamin Jeffries, M.D.....1753 Guardian Bldg., Detroit 26
H. L. Keim, M.D.....1110 David Broderick Tower, Detroit 26
E. S. Parmenter, M.D.....Alpena
G. E. Sands, M.D.....5419 Livernois, Detroit 10
D. E. Siler, M.D.....1811 Michigan Ave., Saginaw
Frank Stiles, M.D.....2012 Olds Tower Bldg., Lansing

Postgraduate Medical Education Committee

H. H. Cummings, M.D., *Chairman,* (1952)..Dept. of P. G. Medicine University Hospital, Ann Arbor
E. I. Carr, M.D., *Vice Chairman,* (1952)....300 W. Ottawa, Lansing
B. R. Corbus, M.D., (1951).....Metz Building, Grand Rapids
G. J. Curry, M.D., (1951).....401-3 Genesee Bank Building, Flint
A. C. Furstenberg, M.D., (1951).....Dean, University of Michigan Medical School, Ann Arbor
W. B. Fillinger, M.D., (1951).....Ovid
L. J. Gariepy, M.D., (1952).....16401 Grand River, Detroit 27
J. R. Heidenreich, M.D., (1953).....Daggett
D. H. Kaump, M.D., (1953).....Providence Hospital, Detroit 8
Alfred LaBine, M.D., (1952).....Houghton
P. A. Riley, M.D., (1951).....500 S. Jackson, Jackson
J. M. Robb, M.D., (1951)....641 David Whitney Building, Detroit 26
G. H. Scott, Ph.D., (1951).....Dean, Wayne University College of Medicine, Detroit
J. M. Sheldon, M.D., (1953).....University Hospital, Ann Arbor
W. J. Smith, M.D., (1951).....E. Harris Street, Cadillac
E. D. Spalding, M.D., (1953).....10 Peterboro, Detroit 1
F. A. Weiser, M.D., (1951).....4162 John R., Detroit

(Continued on Page 154)

from among
all antibiotics,
Neurologists and Neurosurgeons
often choose

AUREOMYCIN

because

It readily passes into the cerebrospinal fluid, the presence of meningitis making little difference in its concentration.

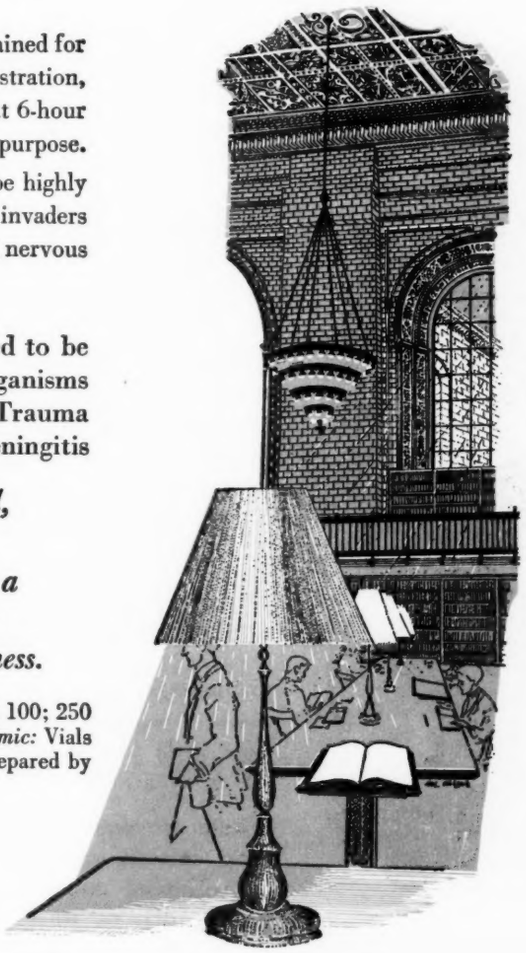
Measurable serum levels are maintained for as long as 12 hours after oral administration, oral doses of 5 to 10 mg. per kilo at 6-hour intervals being adequate for this purpose.

Aureomycin has been shown to be highly effective against those bacterial invaders commonly encountered in central nervous system infections.

Aureomycin has been reported to be effective against susceptible organisms in: Brain Abscess • Cranial Trauma Infection • Encephalitis • Meningitis

Throughout the world, as in the United States, aureomycin is recognized as a broad spectrum antibiotic of established effectiveness.

Capsules: 50 mg.—Bottles of 25 and 100; 250 mg.—Bottles of 16 and 100. *Ophthalmic:* Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.



LEDERLE LABORATORIES DIVISION
AMERICAN Cyanamid COMPANY
30 Rockefeller Plaza, New York 20, N.Y.

MSMS COMMITTEE PERSONNEL

(Continued from Page 152)

Ethics Committee

L. J. Morand, M.D., *Chairman*, (1951).....1553 Woodward Avenue, Detroit
D. C. Eisele, M.D., (1952).....Ironwood
W. L. Harrigan, M.D., (1953).....Mt. Pleasant
H. B. Hoffman, M.D., (1952).....121 Ludington Avenue, Ludington
W. E. Nesbitt, M.D., (1951).....312 Second Avenue, Alpena
H. W. Porter, M.D., (1954).....505 Wildwood Avenue, Jackson
A. H. Price, M.D., (1954).....62 W. Kirby, Detroit 2
M. R. Weed, M.D., (1953).....1997 E. Grand Blvd., Detroit

Preventive Medicine Committee

W. S. Reveno, M.D., *Chairman*.....951 Fisher Building, Detroit 2
M. R. Burnell, M.D.....General Motors Building, Detroit
B. E. Brush, M.D.....2799 W. Grand Boulevard, Detroit 2
W. B. Cooksey, M.D.....62 W. Kirby, Detroit 2
H. H. Cummings, M.D.....Dept of P. G. Medicine, University of Michigan, Ann Arbor
A. E. Heustis, M.D.....Mich. Dept. of Health, DeWitt Road, Lansing
R. J. Mason, M.D.....308 N. Woodward Avenue, Birmingham
H. A. Pearse, M.D.....852 Fisher Building, Detroit
H. W. Porter, M.D.....505 Wildwood, Jackson
L. W. Shaffer, M.D.....3852 Bishop Road, Detroit
J. M. Sheldon, M.D.....Dept. of P. G. Medicine, University of Michigan, Ann Arbor
O. D. Stryker, M.D.....Macomb County Health Dept., Mt. Clemens
J. W. Towey, M.D.....Powers
Frank Van Schoick, M.D.....419 W. High, Jackson
R. W. Waggoner, M.D.....Neuropsychiatric Institute, University Hospital, Ann Arbor

Advisory Committee to National Foundation for Infantile Paralysis

M. F. Osterlin, M.D., *Chairman*.....201 State Bank Building, Traverse City
F. M. Adams, M.D.....322 Wabeek Building, Birmingham
E. B. Cudney, M.D.....Pontiac Motor Co., Pontiac
F. E. Curtis, M.D.....10 Peterboro, Detroit 1
A. G. Goetz, M.D.....710 David Whitney Building, Detroit 26
E. E. Martmer, M.D.....526 Professional Building, Detroit 1
N. R. Moore, M.D.....601 Fifth Avenue, Bay City
J. S. Rozan, M.D.....511 Bank of Lansing Building, Lansing
H. H. Stryker, M.D.....Borgess Hospital, Kalamazoo
F. P. Walsh, M.D.....474 Fisher Building, Detroit 2
E. A. Wishropp, M.D.....227 Kenwood Court, Grosse Pointe

Legislative Committee

L. A. Drolett, M.D., *Chairman*.....903 Prudden Building, Lansing
O. O. Beck, M.D.....274 W. Maple, Birmingham
C. L. Candler, M.D.....2006 David Broderick Tower, Detroit 26
L. E. Holly, M.D.....878 N. Second Street, Muskegon
R. J. Hubbell, M.D.....252 E. Lovell Street, Kalamazoo
J. M. Robb, M.D.....641 David Whitney Building, Detroit 26
J. G. Slevin, M.D.....1514 David Broderick Tower, Detroit
R. V. Walker, M.D.....1255 David Whitney Building, Detroit 26

Industrial Health Committee

M. R. Burnell, M.D., *Chairman*.....General Motors Building, Detroit
N. H. Amos, M.D.....1704 Central Tower, Battle Creek
A. L. Brooks, M.D.....General Motors Corp., Pontiac
W. P. Chester, M.D.....5057 Woodward, Detroit 2
Henry Cook, M.D.....326 Genesee Bank Building, Flint
W. A. Dawson, M.D.....25951 Avondale Road, Inkster
E. A. Irvin, M.D.....1343 Buckingham Road, Detroit 30
O. J. Johnson, M.D.....207 N. Walnut, Bay City
H. L. Krieger, M.D.....11390 Strathmore, Detroit 27
V. S. Laurin, M.D.....804 Hackley Union Bank Building, Muskegon
E. F. Lutz, M.D.....13-204 General Motors Building, Detroit 2
N. W. Scholle, M.D.....Anderson Building, Muskegon Heights
H. T. Sethney, M.D.....Menominee Drug Building, Menominee
M. W. Shellman, M.D.....Metz Building, Grand Rapids
E. E. Weston, M.D.....101 James Couzens Highway, Detroit 21
A. H. Whittaker, M.D.....1427 E. Jefferson, Detroit 7
J. L. Zemens, M.D.....Packard Motor Car Co., Detroit 32
C. D. Selby, M.D., *Advisor*.....1916 Military, Port Huron

Advisory Committee to Women's Auxiliary

A. M. Rothman, M.D., *Chairman*....22422 Gratiot Ave. East Detroit
M. A. Darling, M.D.....673 Fisher Building, Detroit
L. J. Geerlings, M.D.....Fremont
N. J. McCann, M.D.....Marquette
H. B. Zemmer, M.D.....Lapeer

Advisory Committee to Michigan State Medical Assistants Society

E. A. Osius, M.D., *Chairman*....901 David Whitney Bldg., Detroit 26
W. E. Barstow, M.D.....St. Louis
William Bromme, M.D.....10 Peterboro, Detroit 1
A. O. Brown, M.D.....742 Maccabees Building, Detroit 2
R. H. Criswell, M.D.....407 Phoenix Building, Bay City
C. A. Payne, M.D.....Blodgett Memorial Hospital, Grand Rapids

You and Your Business

MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
DETROIT—September 24-25-26, 1952

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1952

March 12-14	MICHIGAN CLINICAL INSTITUTE Detroit
March 14	Michigan Heart Day (part of M.C.I.) Detroit
Spring	MSMS Postgraduate Extramural Courses State-wide
April 3	Jackson County Medical Society's Clinic Day .....Jackson
April 9	Genesee County Medical Society's Cancer Day .....Flint
April	Highland Park Physicians Club Clinic Highland Park
May 1	Ingham County Medical Society's Clinic Day .....Lansing
May 7	Third Michigan Industrial Health Day Flint
May 14	Wayne University Medical Alumni Clinic Day and Reunion.....Detroit
June 9-13	AMA Annual Session.....Chicago
July 24-25	Annual Coller-Penberthy Medical Surgical Conference.....Traverse City
July 24-26	Conference on Housing and Living Arrangements for Older People....Ann Arbor
August	Third Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Michigan Society of North Central Counties Grayling
Sept. 24-26	MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION.....Detroit
Oct. 8	Clara Elizabeth Fund—Genesee County Medical Society—Lectures of 1952...Flint
Oct. 9-10	Fourth Michigan Cancer Conference Kellogg Center, East Lansing
Autumn	MSMS Postgraduate Extramural Courses State-wide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

MEDICAL CIVIL DEFENSE NIGHT —MARCH 12, 1952

Norvin C. Kiefer, M.D., Washington, D. C., Director of Health and Special Weapons Defense Division, FCDA, will speak on "The Physician in Civil Defense" at the Medical Civil Defense meeting, Grand Ballroom, Sheraton-Cadillac Hotel, Wednesday, March 12, 1952, 8:00 p.m.

This medical civil defense meeting is sponsored by the Wayne County Medical Society, the Michigan Clinical Institute, and the Michigan State Medical Society.

All members of the Michigan State Medical Society and their wives and guests are cordially invited to hear the interesting presentation of Doctor Kiefer on a subject of intense importance to all residents, especially of critical areas.

MICHIGAN M.D.s PAY AMA DUES

The high percentage of American Medical Association dues paid by Michigan State Medical Society members in 1951 is a matter that offers more than passing interest. Not too long ago, Oscar Ewing, well publicized Administrator of the Federal Security Agency, offered the gloomy prediction, in one of his periodic raves, that the medical profession would not support the American Medical Association by payment of the annual dues levied two years ago.

Michigan's medical men chalked up a 96 per cent record in the payment of 1951 AMA dues!

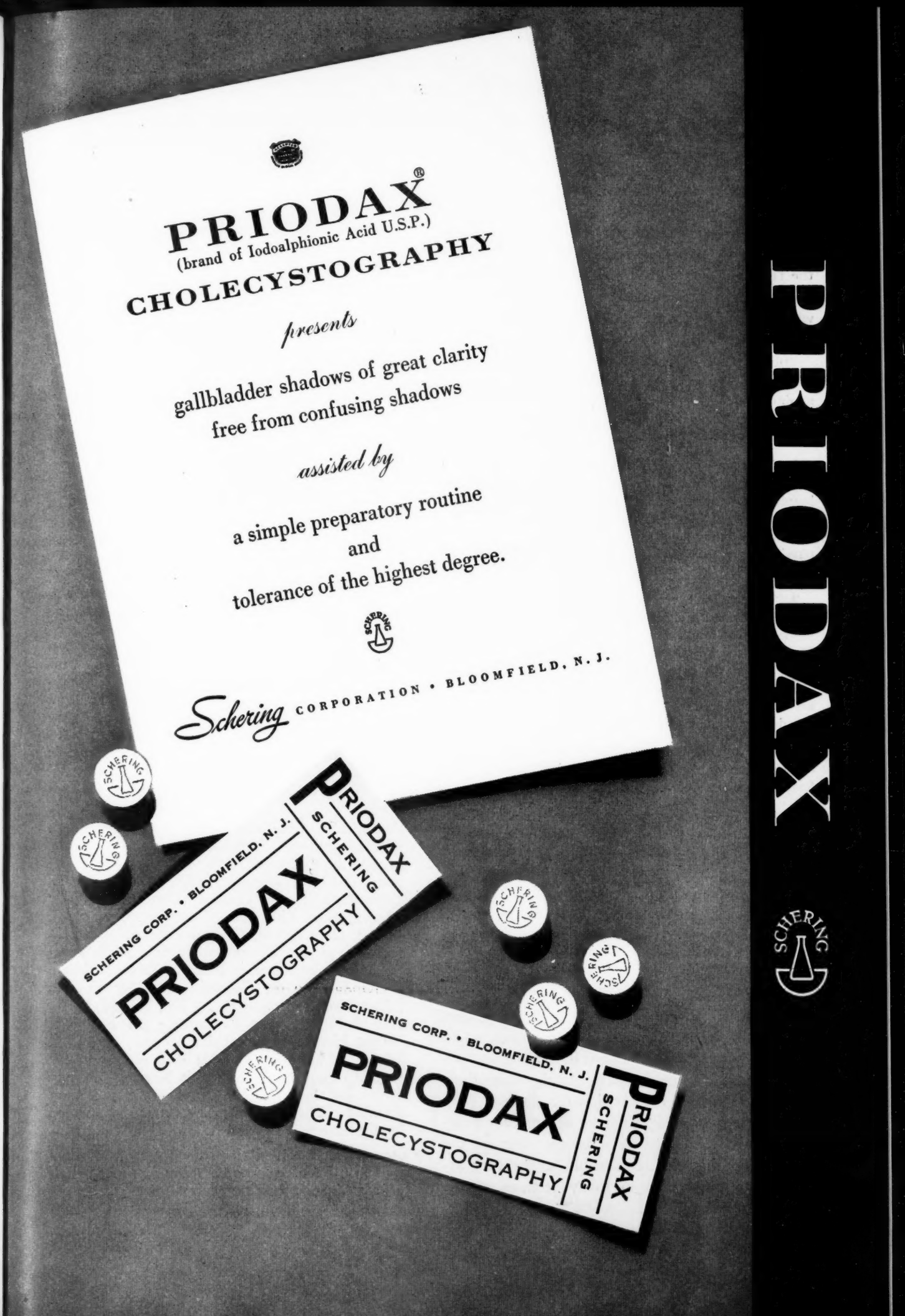
The Michigan medical profession, by its splendid record of 1951, gallantly and magnificently repudiates the sour predictions of Mr. Ewing.

"HESS REPORT" CLARIFIED BY AMA

The AMA Clinical Session in Los Angeles had a total registration of 10,071, including 4419 Doctors of Medicine.

Highlights of the House of Delegates Proceed-

(Continued on Page 158)


PRIODAX®
(brand of Iodoalphionic Acid U.S.P.)
CHOLECYSTOGRAPHY
presents
gallbladder shadows of great clarity
free from confusing shadows
assisted by
a simple preparatory routine
and
tolerance of the highest degree.
Schering CORPORATION • BLOOMFIELD, N. J.
SCHERING CORP. • BLOOMFIELD, N. J.
PRIODAX
CHOLECYSTOGRAPHY
PRIODAX
SCHERING
SCHERING CORP. • BLOOMFIELD, N. J.
PRIODAX
CHOLECYSTOGRAPHY
PRIODAX
SCHERING
PRIODAX
SCHERING

"HESS REPORT" CLARIFIED BY AMA

(Continued from Page 156)

ings included the following clarification of the "Hess Reports," covering the complex and controversial problem of the relation of physicians and hospitals. By action at the Los Angeles meeting, the House of Delegates issued "Guides for Conduct of Physicians in Relationships with Institutions" which supersede the earlier "Hess Reports." These are its significant passages:

1. A physician should not dispose of his professional attainments or services to any hospital, corporation or lay body under terms or conditions which permit the sale of the services of that physician by such agency for a fee.

2. Where a hospital is not selling the services of a physician, the financial arrangement if any between the hospital and the physician properly may be placed on any mutually satisfactory basis. Thus, any hospital, corporation or other lay body may properly remunerate a physician for teaching, research, charitable services or the like.

3. The contract provisions of hospital service plans should be limited exclusively to hospital services. Medical service plans should limit benefits to medical services. The House declared radiology, anesthesiology, pathology and physiatry to be an integral part of the practice of medicine, and thus constitute *insurable medical* services, *not hospital* services. Blue Cross and Blue Shield were urged to implement this decision.

4. The lay hospital management should give proper consideration to the advice of the professional staff on financial problems of the hospital.

5. The pathologist, roentgenologist, anesthesiologist and physiatrist, as well as other staff members, should have equal rights, privileges and standing as active staff members.

6. Controversies between physicians and hospitals which cannot be settled locally should be submitted to county and state society hospital relations committees and to the AMA Judicial Council, in that order, for advice and recommendation.

In contrast to the "Hess Reports," the new "Guide" makes no mention of disciplinary action against a hospital which persists in keeping an "unethical" physician on its staff. At the same time, the "Guide" makes it clear that the decision as to the ethical or unethical nature of contract practice must be based on its ultimate effect on the public, and that this relationship might vary according to differences in many sections of the country.

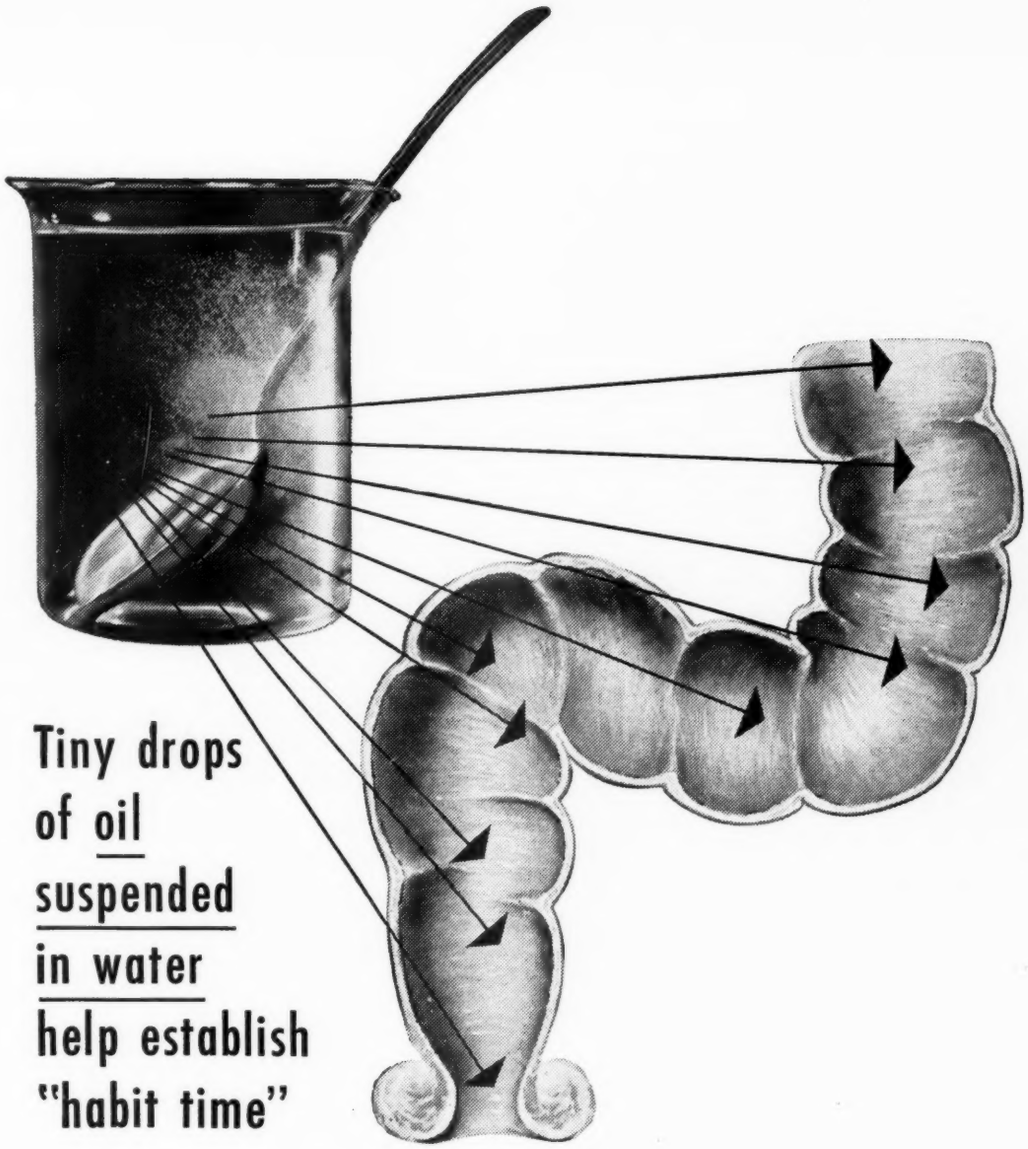
HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of December 13, 1951

Seventy-two items were presented to the Executive Committee on December 13. Chief in importance were:

- Financial reports were presented and the high percentage of AMA dues paid by Michigan State Medical Society members was noted—it was requested that this fact be placed before The Council at its January Annual Session. Bills payable were presented and approved for payment.
- The Committee of Seven to Study Basic Science Act was maintained on a "stand-by basis" and the 1951 House of Delegates' instructions concerning proposed amendments to the Basic Science Act were referred to the MSMS Legislative Committee for implementation.
- Committeee reports—the following were given consideration: (a) Mental Health Committee, meeting of November 11 (including "Suggested Plan for Department of Mental Health as developed by the Michigan State Medical Society," which Plan was approved by the Executive Committee of The Council, with commendation to the Mental Hygiene Committee for a job well done); (b) Beaumont Memorial Restoration Committee, meeting of November 25; (c) Maternal Health Committee, meeting of December 4; (d) Postgraduate Medical Education Committee, meeting of December 6; (e) Committee on Study of Medical Practice Act (MSMS representatives to), meeting of December 13; and (f) Advisory Committee to Michigan Social Welfare Commission, meeting of December 7.
- Committee appointments. The President appointed John G. Slevin, M.D., Detroit, to the Legislative Committee; E. C. Long, M.D., Detroit, and C. J. Poppen, M.D., Lansing, to the Rheumatic Fever Control Committee. The Chairman of The Council appointed Harry J. Loynd, Detroit, and Lawrence Reynolds, M.D., Detroit, to the Beaumont Memorial Restoration Committee. Also, Max L. Lichter, M.D., Melvindale, to the Committee on Atomic and Allied Procedures and H. Marvin Pollard, M.D., Ann Arbor, to the Committee on Study of "Little Hoover" Commission Report, and J. A. Witter, M.D., Detroit, as MSMS representative to the Committee on Careers in Nursing (a Committee of the Michigan Nursing Center Association). These appointments were confirmed by the Executive Committee of The Council.
- Occasional "profiles" in THE JOURNAL of doctors who have done outstanding work in behalf of Michigan Medicine were approved, as per

(Continued on Page 160)



Tiny drops of oil suspended in water help establish "habit time"

PETROGALAR provides a moderate intake of mineral oil in the form of a water-miscible suspension.

This oil-in-water combination permeates the fecal residue to produce:

- Gentle lubricant action, without "leakage"
- Soft, nonirritating, easily passed stools
- Comfortable bowel movement

PETROGALAR may be taken alone or in milk, water or fruit juices—with which it is readily miscible.

PETROGALAR®

Aqueous Suspension of Mineral Oil, Wyeth

Wyeth® Incorporated, Philadelphia 2, Pa.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 158)

the suggestion of Editor Wilfrid Haughey, M.D.

- Following the suggestion of AMA Delegate J. S. DeTar, M.D., Milan, The Council Chairman appointed members of the MSMS Geriatrics Committee as official representatives to attend the 1952 Conference on Handicapped Workers Over Forty. The Council Chairman also announced that, at the invitation of Dr. Wilma Donahue, Secretary of the Conference, the following MSMS representatives are nominated on the Planning Committee for the 1952 Conference: R. L. Novy, M.D., Detroit, L. Fernald Foster, M.D., Bay City, J. S. DeTar, M.D., Milan, Wilfrid Haughey, M.D., Battle Creek, and William Bromme, M.D., Detroit. These appointments were confirmed by the Executive Committee of The Council.

- Max R. Burnell, M.D., Detroit, Chairman of the MSMS Industrial Health Committee, was appointed as MSMS representative to the AMA Industrial Health Conference to be held in Pittsburgh, January 18-19, 1952.

- Report was made that the November, 1951, Bulletin of the Wayne County Academy of General Practice included the guest editorial of The Council of the Michigan State Medical Society signed by its Chairman, following instruction of The Council given on September 23, 1951: "That a letter be written by The Council, to be signed by the Chairman of The Council."

- The Legal Counsel's report included written opinions on (a) Rules of evidence; and (b) Law re indication of professional status on prescriptions and other documents of medical practice.

- Rheumatic Fever Coordinator Leon DeVel, M.D., presented a detailed report on progress and activity in each of the Rheumatic Fever Control Centers of Michigan; Dr. DeVel was requested to provide a summary of his report for the County Societies Committee of The Council, meeting on January 24.

- Proposed hospital in South Oakland County. A resolution from the Oakland County Medical Society, adopted December 5, 1951, re two concepts for the operation of the proposed hospital in South Oakland County was presented and thoroughly discussed. The general principles enunciated during the discussion were developed into a resolution which was adopted by the Executive Committee and forwarded to the Oakland County Medical Society.

- Three problems of mutual interest were presented by State Health Commissioner A. E. Heustis, M.D., and discussed by members of the Executive Committee of The Council.

THREAT OF SOCIAL SECURITY

Both the life insurance industry and the medical profession have been blithely indifferent to the threat of Social Security. They have failed to see that this law is a cleverly devised scheme to socialize the United States. The purpose and meaning of the law have been concealed. Ultimate costs have been played down; benefits have been maximized and glorified.

Physicians, farmers, undertakers, and a few other favored groups won a temporary reprieve when the 1950 amendments were passed. It has been next to impossible to persuade individual physicians or organized medicine to become interested in the entire Social Security program and its background.

Five members of Congress now propose to enslave another 11 million persons who are presently free from the Social Security yoke. Senators Herbert H. Lehman (D., N.Y.), James E. Murray (D., Mont.), Hubert H. Humphrey (D., Minn.), Representatives John Dingell (D., Mich.), and Franklin D. Roosevelt (D., N.Y.) plan to introduce a bill extending coverage and increasing cash benefits. Persons who would be dragooned into the system would include 4,500,000 farmers, 1,400,000 farm workers, 1,300,000 domestic workers, and 30,000 professional workers—engineers and architects. Will physicians be far behind?—The Shearon Legislative Service, January 10, 1952.

PRESIDENT'S STATE OF THE UNION MESSAGE

The President, on January 9, read to a joint session of the House and Senate a nine-page State of the Union message. Following are quotations pertaining to medical legislation:

"I think everybody knows that social insurance and better schools and health services are not frills, but necessities in helping all Americans to be useful and productive citizens, who can contribute their full share in the national effort to protect and advance our way of life.

(Continued on Page 162)

PRESIDENT'S STATE OF THE UNION MESSAGE

(Continued from Page 160)

"We urgently need to train more doctors and other health personnel, through aid to medical education. We also urgently need to expand the basic public health services in our home communities—especially in defense areas. The Congress should go ahead with these two measures immediately.

"I have set up an impartial commission to make a thorough study of the Nation's health needs. One of the things this commission is looking into is how to bring the cost of modern medical care within the reach of all our people. I have repeatedly recommended national health insurance as the best way to do this. So far as I know, it is still the best way. If there are any better answers, I hope this commission will find them. But of one thing I am sure: something must be done—and be done soon."

Meanwhile, the Commission has started on its task, under the direction of Dr. Paul Magnuson. At the group's first meeting, Dr. Magnuson announced that the Commission staff would be supervised by Dr. H. A. Press, who was closely associated with Dr. Magnuson when the latter was head of the Veterans Administration's Department of Medicine and Surgery. Dr. Press is taking a leave of absence from the Veterans Administration, where he has been serving as Director of Program Analysis in the medical department. Several other staff appointments will be announced shortly. Although the survey originally was scheduled for completion in about a year, Dr. Magnuson says he now thinks more time may be needed. He expects shortly to announce appointment of another physician to the Commission to fill the place left vacant by the resignation of Dr. Gunnar Gundersen, AMA Trustee. The Commission includes labor, farm, and consumer members, as well as representatives of the health professions.

FRANK'S BOYS WIN DEBATE

Frank G. Dickinson, director of the AMA Bureau of Medical Economic Research, coached two "boys" on a debating team who took the negative side of the subject: "Resolved: That this House recognize the need for a free National Health Service."

The affirmative side was taken by two young students from Britain, members of the Oxford University debating team.

A great deal of literature and statistics was sent by both Dr. Dickinson and the AMA Council on Medical Service to Murdo, the Robber, and Bill, the Bad Check Passer. They were members of the debating team of the Norfolk State Prison Colony at Norfolk, Mass.

The two teams debated the subject before an audience of 600. The judges were former Governor William S. Flynn of Rhode Island, Justice Harold Williams of the Massachusetts Supreme Court, and Dean Erwin N. Griswold of the Harvard Law School.

The judges' unanimous decision was a victory for the Norfolk prison team.

In a "letter of appreciation" to Dr. Dickinson later, Bill, the Bad Check Passer, said that this was the first time the British team had been defeated in fifty-two debates in which it had participated throughout the eastern part of the United States. In most of the debates, the free national health service subject was discussed. After the prison debate the audience voted, too. The vote was four to one against.

Bill, the Bad Check Passer, said he thought he clinched the decision of the judges with:

"Guests of Norfolk, voluntary and involuntary, a free national health service will not make medical service better, but worse. The neurotics and malingerers will swamp our doctors and make it impossible for them to tend the really sick. I have been an unwilling native in a socialist Utopia for some time, and I know it will not work. . . . This talk of free service is just political camouflage."

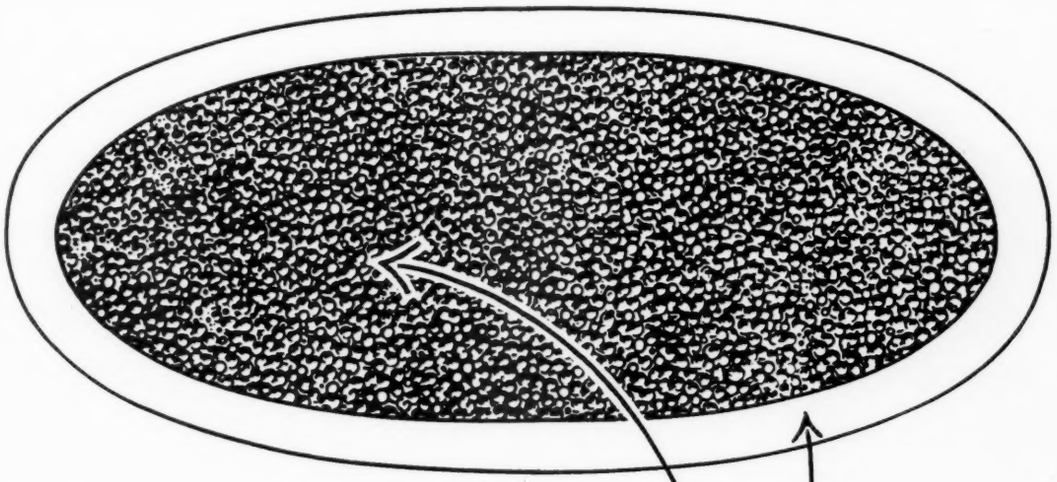
His argument apparently did the trick.

(The Editor heard this item announced over the radio, to the effect that the English boys had not lost a debate against the best in our colleges but went down to defeat against two prison inmates. Make your own deductions.)

WELFARE SPENDING

In 1932 the Federal Government spent $4.4 million on public charity and related programs. Combined expenditures by Federal, State, and local governments for public aid that year were $207.6 million. In 1950, less than two decades later, in a period of full employment, high wages, and seeming prosperity, the Federal Government spent $6,691.9 million and the combined total for Federal, State, and local governments for Social

(Continued on Page 164)



NEW Livonamine

Here are the features of our new Livonamine, a comprehensive anti-anemic tablet, specially indicated for therapy of microcytic and macrocytic anemias of nutritional origin:

1. **2.5 micrograms of crystalline vitamin B_{12} are incorporated into the coating of the tablet.**

2. **In addition, the liver concentrate of each tablet furnishes 1.3 to 1.7 micrograms of Vitamin B_{12}, as it rigidly conforms to the specifications of the National Formulary.**

Each tablet contains:

Liver Concentrate N.F.....3 gr.

Ferrous Sulphate Exsiccated.....2 gr.

Thiamine Chloride (Vitamin B_1).....1 mg.

Crystalline Vitamin B_{12}.....2.5 mcg.

Supplied to you in bottles of 1000 for dispensing, or on your prescription.

The J. F. Hartz Company • 780 W. 8 Mile Rd., Ferndale 20, Mich.

Phone JOrdan 4-5780

The Easter Seal Appeal

Next month, between March 13 and April 13, 29 million American homes will receive through the mails a gaily colored sheet of Easter Seals. Accompanying these bright symbols of hope will be a letter asking support for one of our nation's most important voluntary health and welfare organizations.

It is a cause in which the doctors of medicine of this nation have both a keen interest and a large stake.

Their interest stems from the fact that thousands of medical practitioners in all the states, the District of Columbia, Alaska, Hawaii and Puerto Rico, participate in the work being done by the National Society for Crippled Children and Adults and its 2,000 affiliates—the Easter Seal societies—like the Michigan Society for Crippled Children and Adults, Inc. Since its founding in 1921, literally hundreds of M.D.s have been and are now actively working with these National Society affiliates as advisors, counselors and consultants.

As a matter of fact, planning and development of Easter Seal programs for crippled children are done at the national level in close co-operation with and under the direction of the appointed liaison officers of the American Medical Association, medical specialty groups and other allied professional organizations. Similarly, at the state and local levels, advisory committees and councils composed of physicians, educators and other professionally trained persons guide service programs. Just one instance of this is apparent in the fact that 492 pediatricians—representing only one specialty field—are assisting the programs of state and local crippled children's societies.

The doctors' stake in this great nationwide network of facilities and services is twofold. It is through the more than 500 specific facilities maintained by the Easter Seal societies and through the services of more than 2,000 professionally trained persons such as therapists, psychologists, medical social workers and educators they employ that doctors find the treatment and training for crippled children which implement their own efforts.

Of significance to American doctors, also, is the fact that this cause is a great voluntary effort, representing the American people's way of providing help for those who are unable to obtain it for themselves. It is a cause which demonstrates dramatically the sense of individual responsibility for one's neighbor. Last year this help was extended to 228,000 crippled children and adults.

Because this is a voluntary effort, the major source of support for these services is the American people themselves. The annual Easter Seal appeal began in 1934 and today has the support of millions of small donors throughout the nation, as opposed to large corporate contributors. As we mentioned, in 1952 Easter Seal letters will go to 29 million homes. That will be the only approach, no door-to-door solicitation or in-plant solicitation being made. Today, more than ever, this appeal needs the support of the medical profession.

Funds are needed this year to support a $10 million program. In a period of rising costs, it is obvious that services for crippled children, always expensive, will cost more than ever before. Less than $10 million will mean curtailment of existing services.

Doctors of Medicine can share the leadership in seeing that this 1952 Easter Seal appeal is successful, thus once more showing their fellow Americans that where there is a need, the doctor will help find a way.

Each kind of *bird*, for some reason yet unknown, tends to build a nest different from every other kind.

WELFARE SPENDING

(Continued from Page 162)

Security and related programs was $13,064.5 million—over $13 billion!

In other words, we now spend each year 63 times as much for public charity and related programs as we did in the depth of the Great Depression. The Federal Government is spending over 1,500 times as much. If we spend in such a wild fashion during an era of prosperity, what would the cost be during a depression?—W. RULON WILLIAMSON, a distinguished actuary, at the Life Insurance Conference, White Sulphur Springs, June 14-16, 1951.

Let the Patient Beware

"A patient who seeks treatment from an osteopath for the cure or alleviation of his condition is charged with knowledge of the fact that the osteopath would follow the methods and practices observed in the osteopathic system of treatment, and is not in a position to complain that the methods and standards of practice customarily observed by another school of medicine were not followed."

This is part of the syllabus in the case of Bryant v. Biggs, decided by the Michigan Supreme Court on September 5, 1951 (Mich. 331-64). Its implications are obvious, chiefly that the patient "is not in a position to complain" if he receives treatment from an osteopath which he feels is not up to the standards of medical practice.

The following are additional extracts from the Bryant v. Biggs syllabus:

"The implied contract between a patient and a surgeon requires the latter to use the degree of diligence and skill ordinarily exercised by the average of the members of the profession in the same locality or in similar localities, with due consideration to the state of the profession at the time."

"An osteopathic surgeon has the duty to use that degree of care and skill in the handling of a thyroid condition in a patient, and in the treatment given the patient, that is customarily used in the community or similar communities by ordinary or average practitioners of osteopathy and is not held to the observance of standards of practice or methods of practice customarily observed by practitioners belonging to other schools devoted to the cure, alleviation, and treatment of human ailments and diseases."

A second damage suit against an osteopath (Pedler v. Emmerson, Mich. 331-78), brought by a patient who erroneously believed the standards of practice of M.D.s and osteopaths were the same, also was decided by the Michigan Supreme Court on September 5, 1951, along the same lines as Bryant v. Biggs (above).

All patients should be informed concerning this *double* standard of practice, to obviate additional misunderstandings requiring Supreme Court determination.

Cancer Comment

CANCER IN CHILDHOOD

Cancer in childhood is assuming greater importance and in Michigan now occupies second place as a cause of death from disease in the age group five to fourteen. It ranks fourth as a cause of death from disease in ages under five. These facts, often not appreciated by the public or medical profession, indicate that tumors, both benign and malignant, are taking a heavy toll of life among the younger age groups.

All tumors in childhood are dangerous irrespective of their location or histological character. So-called benign tumors may cause serious disability, deformity or death from their location, size, or interference with vital functions. Probably the most striking example of this type of tumor is the astrocytoma of the central nervous system.

The six principal sites of cancer in children are the bones, eyes, kidney, central nervous system, blood-forming and lymphoid tissues and the skin and its supporting structures. All physicians are familiar, or should be, with the symptoms of retinoblastomas, Wilms' tumors and the leukemias. Almost daily the newspapers carry reports of the presence of one or more of these types of cancer in some child in their communities so they are becoming commonplace news items.

What is less appreciated by the public and medical profession are the danger signals of a central nervous system tumor in a growing child. Authorities in this field stress the emotional and personality changes that often direct attention to these patients and assist definitely in the diagnosis. In a child who changes from a well-behaved, studious, and co-operative individual to one of the opposite type or who complains of visual defects, headaches, or other symptoms incompatible with his former character, a central nervous system neoplasm should be strongly suspected and a definite diagnosis established before disciplinary measures are taken. The need for this appreciation of the child's condition applies to his class room teacher as well as to the family physician and is an added argument for requiring an understanding of fundamental cancer knowledge by all teachers in schools and colleges.

A favorable aspect of many types of childhood cancer is their accessibility for examination. With the exception of tumors of the central nervous system and some lymphomas, diagnosis often can be made on the physical examination alone. Thus, theoretically at least, many more such patients should be cured than is now the case.

It should be remembered that most childhood cancers differ as to location and structure from the forms most commonly seen in adults. Many of them develop more rapidly than do adult tumors and for this reason prompt diagnosis and treatment are imperative measures to save a life. There is a widely held belief that cancer in childhood is a more fatal disease than in adults but this is so only because many such cases are diagnosed late. In the very young, symptoms must be elicited objectively as the patient cannot help in describing his condition. A healthy suspicion of cancer in the mind of the physician, especially the pediatrician, when making his routine examination of children, particularly of those under ten years of age, often will pay handsome dividends in the discovery of early and curable neoplasms in those patients. It should be kept in mind that development of a tumor may antedate the possibility of a diagnosis by several months and so the early diagnosis becomes a relative possibility.

The public must realize that neoplasms constitute a real health hazard during childhood. The periodic examination during these ages should be regularly continued in the absence of obvious signs of illness.

Public health personnel also have a responsibility in this matter, largely through the lay education program. Parents should be made to see the necessity for regular examinations of their children and as the child advances through his education to the high school he should have sound health teaching in cancer control as it applies to himself. Such an educational program would enable the individual to face his later years much better equipped for protection against this disease than would be the case if his early cancer education had been neglected.

Editorial Comment

SUSPICIOUS AUSPICES

Dr. Gunnar Gundersen of La Crosse, Wisconsin, is a former president of the Wisconsin State Medical Society and a regent of the University of Wisconsin. He is better acquainted than most with the convictions of a majority of the 15 members of the commission which President Truman has appointed to study the "health needs of the nation."

Dr. Gundersen has declined to serve on the commission. He terms it a "masquerade," packed with advocates of the President's compulsory health insurance scheme.

Honestly and fairly conducted, such a survey could be useful in suggesting policies to improve medical training, to correlate public and private health services, to get more, better and less expensive care of the sick.

Precedent, however, supports Dr. Gundersen's conclusion that Mr. Truman's interest in health is largely confined to the convalescence of his political machine. Under his auspices, the findings of the commission are discounted in advance, on the theory that he is far too cagey to risk a report that might be critical of one of his favorite vote-getting appeals.—*Chicago Daily News,* January 2, 1952.

CAVEAT EMPTOR

Treatment by a practitioner of one school of medicine cannot be adjudged malpractice by the standards of any other school of medicine. The decisions in two cases* recently reviewed by the Michigan Supreme Court emphasize this point, and, in effect, put the public on notice to be wary, since *there is more than one standard of medical practice.*

Standards for the practice of the healing arts have been established and improved by doctors of medicine for many years and have been widely publicized and accepted. The entry of other systems of practice with their claims to equality and even superiority and their not too clearly defined methods of practice is responsible for the confusion now disclosed by the Court.

Patients who select *any* healer, assuming that all have the same standards, belatedly discover, when they find themselves aggrieved, that what they thought was the real article was something of foreign quality based on a different set of standards.

Illustrative of this rude awakening are the two cases referred to above: one, in which the widow of a patient subjected to thyroidectomy by an osteopath claimed malpractice and was denied damages because she wrongly assumed that the standards of the allopathic school applied. The other, involving an injury to a hand in which it was claimed the defendant osteopath failed to suture cut tendons, with resultant disability, was also denied redress for the same reason.

Among the several reasons leading to the decisions is one which puts the blame squarely on the shoulders of the patient, to wit: "a patient who seeks treatment from an osteopath for the cure or alleviation of his condition is charged with knowledge of the fact that the osteopath would follow the methods and practice observed in the osteopathic system of treatment, and is not in a position to complain that the methods and standards of practice customarily observed by another school of medicine were not followed."

With no uniform set of standards for the various systems of practice now legalized by the State, it is incumbent on the patient to inform himself as to the differences that exist, since he alone is responsible for his choice. And the Court has in effect wisely cautioned: let the buyer beware.—W. S. Reveno in *Detroit Medical News,* December 31, 1951.

*Mich. Reports, 331:64-81, Oct. 4, 1951.

ANOTHER CLOAK

The refusal of Dr. Gunnar Gundersen to serve on President Truman's commission to study the Nation's health needs is not surprising. Like Judge Thomas F. Murphy, who refused to carry the whitewash pail for Mr. Truman in "cleaning up" corruption in the Government, Dr. Gundersen, a former president of the Wisconsin State Medical Society, declines to take part in what he calls a "masquerade." The commission, Gundersen intimates, is weighted with advocates of the Truman-Ewing plan for compulsory health insurance, as a forerunner of socialized medicine.

An honest inquiry into the state of our public health by competent and unbiased medical men would be one thing. An "investigation" for the purpose of stimulating the flagging interest in Ewingism is quite another. A man of Dr. Gundersen's personal integrity and professional ethics would hardly lend the authority of his name and reputation to any such political ruse.—*The Detroit Free Press,* January 3, 1952.

Most ovarian tumors are resistant to irradiation, and it should never be employed as a substitute for surgery.

* * *

Routine pelvic examination at frequent intervals seems to offer the only solution to the problem of early diagnosis of ovarian malignancy.

Michigan Clinical Institute Presents 1952 Heart Day Friday, March 14

S. A. Levine, M.D.

In keeping with its policy of bringing the latest scientific information concerning cardiovascular diseases to Michigan's Doctors of Medicine, the Michigan Heart Association will once again present its Annual Heart Day in Detroit on Friday, March 14, 1952 (in conjunction with the Michigan Clinical Institute, March 12-14).

Headlining the Third Annual Heart Day will be Samuel A. Levine, M.D., of Boston, Massachusetts, who is an internationally recognized authority in the field of heart disease. In addition to serving on the staff of the Peter Bent Brigham Hospital in Boston, Dr. Levine is also Clinical Professor of Medicine at the Harvard Medical School.

A preliminary advance digest of Dr. Levine's paper, "The Importance of the History and Physical Examination in the Diagnosis of Heart Disease," indicates that many valuable practical aids in cardiac diagnosis will be offered. Particular emphasis is given to those aids available to all practicing physicians which require none of the elaborate and often expensive laboratory procedures that are necessary only in less common cases. Dr. Levine's paper will be presented at the noonday luncheon on Heart Day.

In addition to Dr. Levine's paper, this year's Heart Day program will also feature the presentation of six scientific papers concerned with heart research work being conducted in Michigan, by Michigan Doctors of Medicine, under the financial sponsorship of the Michigan Heart Association. The Heart Day speakers, including a brief summary of their research projects, are as follows:

1. Franklin D. Johnston, M.D., University Hospital, Ann Arbor

   "The Proper Place of the Electrocardiogram in Clinical Practice."

Studies on low frequency vibrations over the Precordium have been carried out in this project. These vibrations are of clinical importance because many of them can be seen or felt by any physician who is aware of their existence. Most of the vibrations are inaudible because the frequency is below the audible range. The study of these vibrations is important to the Doctor of Medicine since their recognition may help in the diagnosis and in estimating the outlook of heart patients.

2. Conrad R. Lam, M.D., Henry Ford Hospital, Detroit

   "The Surgical Treatment of Mitral Stenosis"

Funds for this project were appropriated so that research in the vital and important field of heart surgery could be continued.

Methods of transplanting heart valves, methods of "splicing" sections of blood vessels, methods of permanently closing defects in the walls of the chambers of the heart are being developed and perfected in this project. The perfection of these techniques will eventually permit more successful operations on the heart and blood vessels.

3. Gordon B. Myers, M.D., Wayne University College of Medicine, Detroit

   "Modern Treatment of Congestive Heart Failure"

This project is a continuation of previous work in cardiorenal research. It is concerned with the effectiveness of using an extremely low salt content in the diet of patients who do not readily respond to the usual methods of treatment of dropsy due to heart failure. Other types of salts, such as calcium, magnesium, and potassium, are also being measured since it is becoming evident that they too play a part in the causation and treatment of dropsy.

4. Manes S. Hecht, M.D., Children's Hospital, Detroit

   "Current Therapy of Rheumatic Fever in Children"

Funds have been provided for this project so that research in the treatment of rheumatic fever and rheumatic heart disease through the application of ACTH and cortisone could be undertaken. A total of 28 cases, in the acute stage, have been studied and a follow-up on each patient is now being conducted to determine whether these hormones will prevent the development of rheumatic heart disease.

5. Sibley W. Hoobler, M.D., University Hospital, Ann Arbor

   "Drug Therapy of Hypertension"

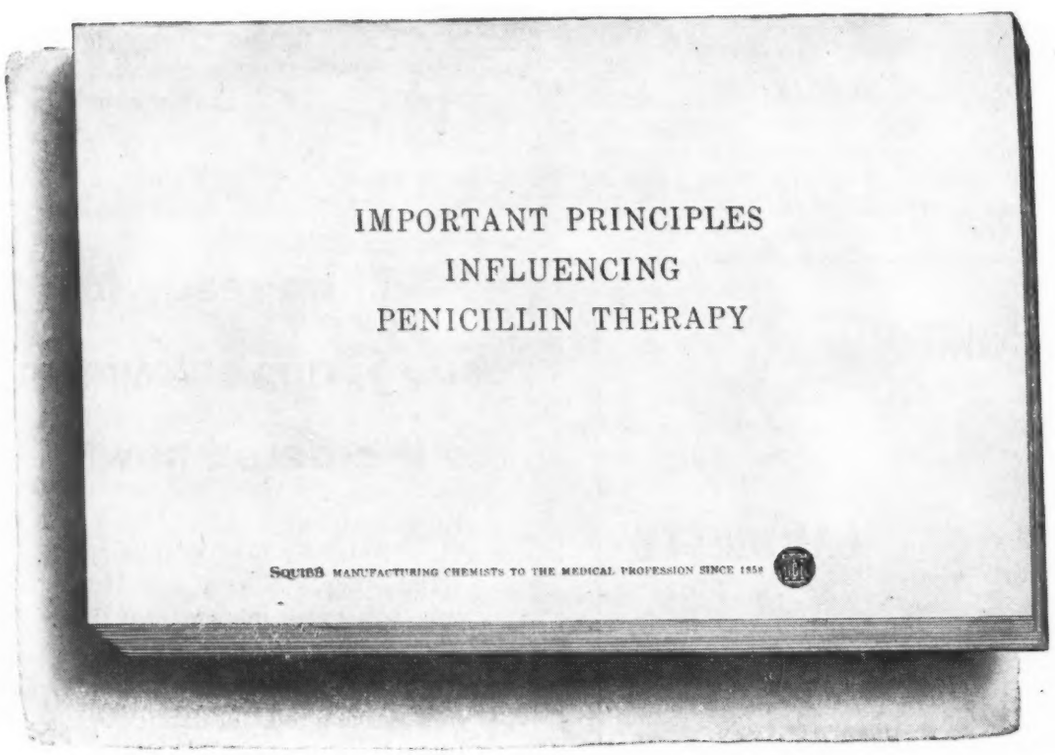
Grant was made to conduct research into the problems of hypertension and uremic poisoning. An "artificial" kidney has been constructed at the University and it has been used successfully in the treatment of patients who have temporary kidney shutdown. In addition to treatment, the kidney is being used to investigate and measure certain pressor substances present in the blood stream of patients with malignant hypertension. Refinements of the technique for more accurately measuring these pressor substances have been developed during the past year. The exact measurement and isolation of these pressor substances is necessary to the ultimate understanding and alleviation of high blood pressure.

6. M. S. Chambers, M.D., Hurley Hospital, Flint

   Panel Discussion on "The Flicker Photometer"

The funds for this project were made available late in 1950. The project is concerned with evaluating the usefulness of the flicker photometer machine as a method of detecting early evidence of diseases of the heart or blood vessels caused by hardening of the arteries.

Latest Information on Penicillin Therapy



Ask Your Squibb Professional Service Representative

The JOURNAL

of the Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME 51 FEBRUARY, 1952 NUMBER 2

The General Adaptation Syndrome

By Bruce C. Lockwood, M.D.

Detroit, Michigan

THE CONCEPT recently developed by Dr. Hans Selye[12,13,14] and others[1,2,4,10] regarding the reaction of the animal body to environmental stress is intriguing because it opens up a vast field for research and thought.

Modern research has mostly been in narrow channels, studying various individual glands, hormones, enzymes, salts and psychic reactions. The general adaptation concept, however, gives consideration to the response of the body as a whole. It is a study of the *strain* produced by *stress* and shows that the body responds biochemically and morphologically in much the same way to various different *stresses*. It has been shown that the animal organism possesses a general defense or adaptation mechanism which it automatically mobilizes against any injurious agent, whatever the nature. Further, it has been shown that this defense mechanism often overdoes itself or reacts abnormally, resulting in serious damaging effect to the animal. The principal agent of this mechanism is the endocrine system. Thus our knowledge of the endocrines is gradually emerging from a state of imagination and theory into some real scientific knowledge.

While investigating the response of animals to injections of various gland extracts, it was found by Selye in 1935 that large doses of several different gland extracts produced similar results. He and others have found that three parts of the body are invariably affected: (1) the adrenal glands are swollen to twice their normal size and are brown-red in color insteal of their normal yellow; (2) the mucosa of the stomach and duodenum is spotted with submucous hemorrhages and bleeding ulcers, and (3) the thymus gland withers to almost nothing.

Further investigation[1,2,12,13,14] showed that these same reactions were obtained in animals by the use of other widely diverse forms of stress such as (1) large doses of various drugs such as atropine, strychnine, formalin, et cetera, (2) various infections and bacterial toxins, (3) excessive muscular exercise and fatigue, (4) fasting,[9] (5) excessive exposure to heat, cold, sun and x-rays,[5,15] and (6) excessive emotional excitement.[7]

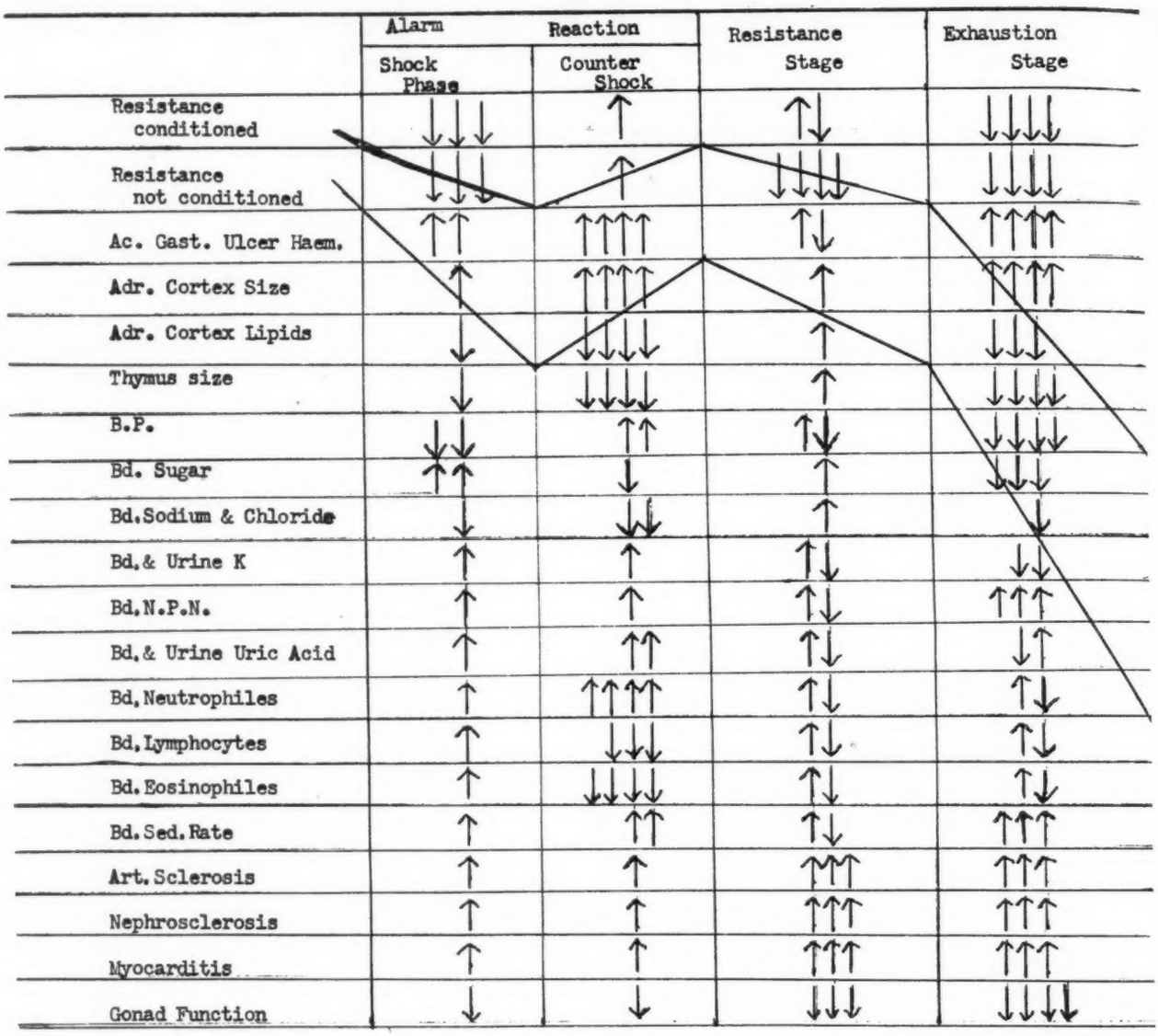
It has also been found that with the above reactions, there are certain characteristic changes in the chemistry of the blood and body fluids and also in the formed elements of the blood and tissues.[3,16]

As the result of a great amount of study, it has been determined that the reaction of the body to stress can be divided into three phases: (1) the alarm reaction (AR), consisting of a shock phase and a counter shock phase; (2) the stage of resistance (where the stress agent was not sufficient to prove rapidly fatal), and (3) the stage of exhaustion. The characteristic findings in these three different phases are shown in Table I. These reactions have been studied in several species of animals and there is no doubt that they represent a general defense reaction against stress in the higher vertebrates including man.

The sequence of events, beginning with the alarm reaction (AR) is started by a stimulation of the anterior pituitary (the boss gland), which increases its secretion of adrenocorticotropic hormone (ACTH), which in turn causes an increased secretion of the adrenal cortex (adrenal corticoids).[1,2,12,13,14]

From the Division of Internal Medicine, Harper Hospital.

TABLE I. THE GENERAL ADAPTATION SYNDROME (SELYE)



The pathway of action of stress to the anterior pituitary is not definitely established. Experiments have shown that it is not always due to hypothalamic stimulation, or to adrenalin (adrenal medulla), or to histamine, or to thyroid hormones.

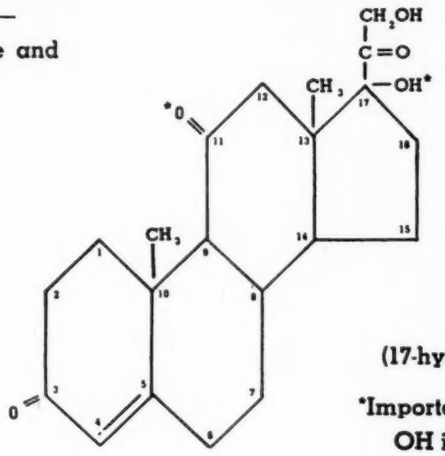
The chief organ where marked and dramatic changes occur due to stress is the adrenal cortex.[3,16] These two adrenal glands normally weigh only about 5 grams each, yet they hold a key position as regulators of vital functions. When they are destroyed, as in Addison's disease, death is inevitable. When they are removed from animals, death occurs within a few days.

The adrenal has a cortex and a medulla. It has been known for many years that the medulla secretes the hormone adrenalin, which has definite actions, such as constricting blood vessels, raising blood pressure and helping to change the liver glycogen to glucose and mobilizing it into the blood stream, especially during emergencies. More recently the functions of the adrenal cortex have been revealed. The adrenal cortex has been found to make a number of hormone substances indispensable to life, storing them as steroids (corticoids), that is, fat soluble solid compounds, which give the glands their normal yellow color. At least thirty of these adrenal cortex steroids have been isolated. Seven different such corticoids have been found to maintain life.

The chemical structure of these adrenal corti-

PRINCIPAL GROUPS OF ADRENAL CORTICAL HORMONES

11- and 11,17-oxysteroid group —
affect chiefly carbohydrate and protein metabolism.

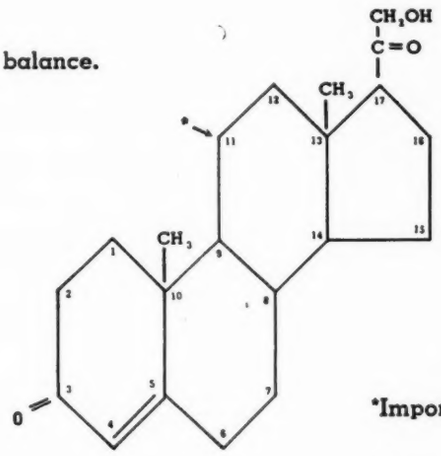


CORTISONE

(17-hydroxy-11-dehydrocorticosterone)

***Important features – 0 atom in position 11, OH in position 17**

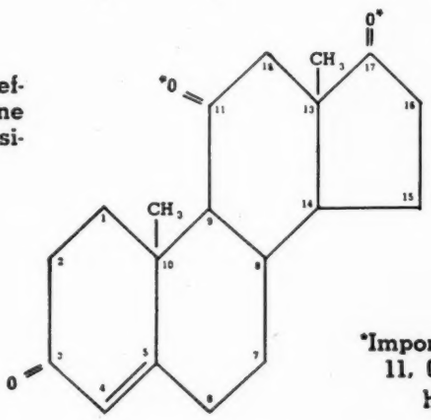
11-desoxy group —
affect chiefly electrolyte balance.



Desoxycorticosterone
(11-desoxycorticosterone)

***Important feature – no 0 atom in position 11.**

Adrenal androgens —
androgenic and anabolic effect; related to testosterone but have an 0 atom in position 11.



Adrenosterone

***Important features – 0 atom in position 11, 0 atom in position 17 hence 17-ketosteroid.**

Fig. 1. (Carlisle, Gibson, Schmatolla) Principal groups of adrenal cortical hormones.

coids is similar to cholesterol, the bile acids, viosterol, and the androgens. They all have the phenanthrene nucleus. Their activity and physiological properties vary much, however, with only slight variations in the structural formula, i.e., the presence or absence of an O or OH at certain carbons.

The basic chemical structure of these substances is shown in Figure 1, which also graphically shows the molecule numbering system with a carbon atom at each number. The substitution of an oxygen atom or a hydroxyl at certain carbon numbers alters definitely the metabolic activity of the compound.

There are three important chemical classes of

active adrenal steroids: (1) those which do not have an oxygen at carbon number 11 (the desoxy type); (2) those that do have an oxygen at carbon number 11 (the oxy type); those which do not are easy to synthesize, but unfortunately do not possess complete therapeutic powers; and (3) those which have an 0 at both C-11 and C-17, the androgens.

Pharmacologic and physiologic observations of many of the adrenal steroids have been limited, up to the present, by their scarcity and expense and can be considered only as preliminary. The following grouping has been established, which, however, may represent an over-simplification, as their functions probably somewhat overlap.

I. The Mineral Corticoids.—Structurally these substances are characterized by an absence of an oxygen (desoxy) at carbon 11. 11-desoxycorticosterone is the most potent of this group which has been synthesized. It is used as the acetate (DCA) in the treatment of Addison's disease. Other steroids of this group include 17-hydroxy-11-desoxycorticosterone (Reichstein's compound S).

These mineral corticoids have a predominant effect on electrolyte and fluid balance. The effects may be listed as follows:

1. Urinary retention of sodium.
2. Urinary retention of chloride.
3. Increased urine excretion of potassium.
4. Increased plasma and extracellular fluid volume.
5. Decreased concentration of sodium and chloride in sweat.
6. Increased connective tissue collogen, fibrin, and hyaline formation.

II. The Gluco-Corticoids.—This group of steroids is characterized by having an oxygen at carbon 11. The 11-oxysteroids and the 11, 17-oxysteroids. They are concerned with the metabolism of carbohydrate, protein and fat, and also the control of lymphoid tissue. Cortisone is in this group.

Their principal effects are as follows:

1. An increased production of glucose (gluconeo-genesis) from protein and fat.
2. An effect on the lymphatic system, involution of the thymus, decreased blood lymphocytes and eosinophiles, and stimulation of the reticuloendothelial system.
3. Increased urine excretion of uric acid and urates.
4. An inhibitory effect on the activity of the mineral corticoids.
5. Decreased production and excretion of adrenal androgen (17-ketosteroids).
6. Decreased normal reaction of tissue to chemical or mechanical trauma; inhibition of inflammation and healing; decreased fibroblast formation; decreased change of histadine to histamine; decreased antibody production; inhibition of tuberculin and other immune reactions.

III. The Androgen-Corticoids (17-ketosteroids).—These steroids have a similar formula to testosterone but differ in having an oxygen at carbon 11. Their metabolic effect is similar to the testicular androgens:

1. Masculinization.
2. Retention of nitrogen, phosphorus, potassium, sodium and chloride.

After the alarm reaction findings were established by experimentation, the next step was a study of the animal's response to a less intense but continuous prolonged stress, not sufficient to be lethal. When animals are subjected to daily sublethal stress with the same agent for weeks instead of days, there occurs during the first few days the usual alarm reaction, with the usual organic and chemical changes.

However, if the animal survives the alarm reaction period, with its shock and counter shock phase, then occurs a stage of resistance in which the adrenals shrink back to normal size and regain their normal yellow color with deposits of steroids, the stomach and duodenum begin to heal, and the thymus regains its normal size; also the blood chemistry changes return to normal.

It has been found, however, that this acquired resistance increases only against the one type of stress employed from the beginning. If in the middle of the stage of resistance period the type of stress is changed to a different one, the animal immediately succumbs. Experiments with graded amounts of stress have shown that the animal's specific resistance to the initial type of stress increases, but its resistance to other types of stress decreases.

The stage of resistance, or adaptation to the original continuous stress, is not permanent. The animals become progressively weaker and after

variable periods of time again get the alarm reaction findings of swollen red adrenals, gastric ulcers, and thymus atrophy. This last stage of exhaustion is similar to the initial alarm reaction. The end is like the beginning.

Thus the struggle of life against stress is found to consist of three secessive stages. The whole battle is named the "general adaptation syndrome" (GAS). Life as a whole can be regarded as a GAS, that ends when resistance or adaptation energy is exhausted.

Further study of the findings produced by prolonged sublethal stress have indicated that certain degenerative diseases are the consequences of "over-adaptation."[12]

Animals can adapt themselves to certain stresses, such as to cold, for example, for periods as long as two or three months. These animals then show interesting changes. The arterial walls are thickened and the lumen almost obliterated in parts of the body; the heart is enlarged and shows Ashoff-like nodules as seen in rheumatism; the kidneys show findings as are found in human nephrosclerosis; the blood pressure shows a marked rise. In other words, long-lasting stress can produce arterial hypertension and cardiovascular disease in animals.

These findings suggested the possibility that the pathological findings might be due to an excessive or abnormal action of the pituitary-adrenal mechanism. Selye theorizes that under certain circumstances or in certain subjects the pituitary ACTH may vary in constituent activities, or cause an adrenal cortex secretion abnormally predominant of the *mineral* or of the *gluco* or of the *andro* effect.

Further study has shown that these same pathologic findings can be produced in animals within three weeks by the injection of large quantities of pituitary extract, or of adrenal cortex hormones. To this purpose, the crystalline desoxy-corticosterone, or DCA, was used, and also a water suspension of the powdered whole anterior lobe of the pituitary, termed "lyophilized anterior pituitary" or LAP. The continuous injections of LAP or DCA are equivalent to the prolonged and excessive secretion of hormones of the pituitary and adrenal, brought about by continuous STRESS.

After determining the relationship of various stresses to the pituitary and adrenal internal secretions and to the development of degenerative body changes, further investigation was done to determine procedures for combating this vicious mechanism.[12] Numerous methods, mostly by trial and error, have been studied in attempting to find ways of preventing or treating the condition. Animals have been subjected to a great variety of procedures and diets.

From the many tests, two clearly defined constructive findings were made. First, it has been found that experimental hypertension and vascular sclerosis produced by injections of DCA was markedly influenced by sodium chloride in the diet. A high sodium intake increased the frequency and intensity of the pathological processes caused by the hormone. Further, on the other hand, when the animals are fed a salt-free diet, hypertension and sclerosis is prevented even when very large amounts of DCA are given.

The second finding of importance was that hypertension and arteriosclerosis caused by stress or by injections of LAP was not affected by salt but was influenced by protein in the diet. A high protein intake aggravated the damage while a low protein intake caused considerable protection to the animals.[13]

Thus in animals, sodium intensifies the action of the adrenal corticoids, and protein intensifies the effects of the pituitary hormones in their injurious effect on blood vessels and blood pressure. The exact mechanism of action has not been determined. Perhaps DCA cannot act without the simultaneous presence of sodium. The pituitary may require food proteins to manufacture its ACTH; perhaps it may later be determined that only certain proteins or amino-acids are necessary.

These experiments strengthen the rather widely held belief that arterial hypertension is a reaction of the body to various forms of stress. Also the findings indicate that the mechanism of action of stress is through the pituitary-adrenal mechanism.

These experiments also strengthen the case of those who believe that a low-protein low-sodium diet is of benefit in the treatment of arterial hypertension.

In all of the experiments, it was found that the earliest and greatest effect, during the resistance phase of the GAS, was on the kidney blood vessels. Thus there is formed the so-called "endocrine kidney," in which when the blood supply is reduced from a strong pulsating to a slow non-pulsating current, the kidney suffers anoxia, and in some way liberates substances, renin and hypertension, which raise blood pressure.[11,16]

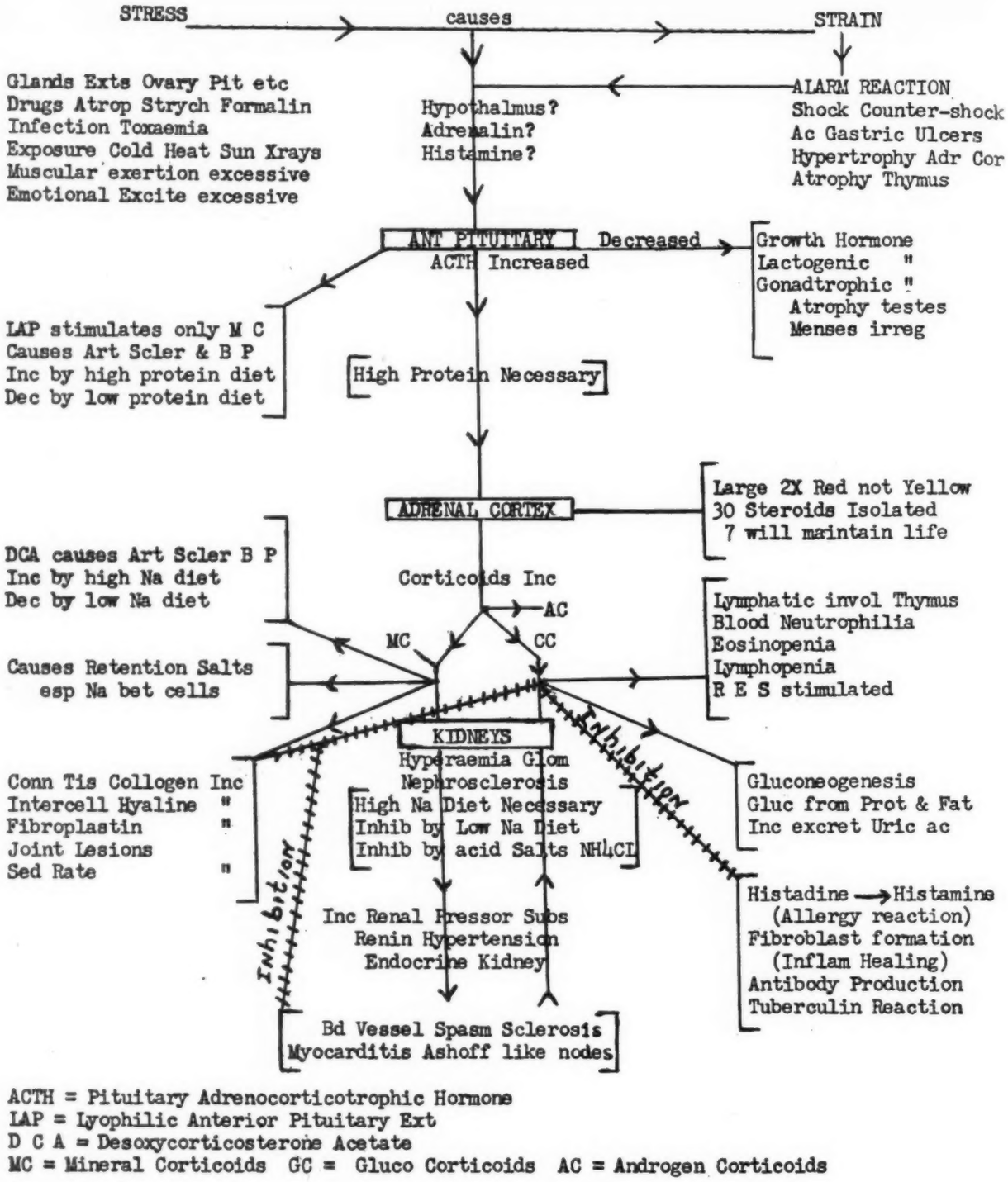


Fig. 2. The general adaptation syndrome (Selye).

Thus, correlation of the findings derived from much experimentation dealing with the alarm reaction and the general adaptation syndrome has led Selye to formulate the hypothesis: long lasting *stress* causes an excessive continuous production of ACTH; this forces the adrenal cortex to an intensive discharge of DCA-like steroids which, among other things, affect the kidney in such a way as to release hypertensive substances.

Further, the commonly accepted idea of the cause of chronic gastric ulcer postulates that it begins as an acute ulcer (as occurs in the alarm reaction) and is perpetuated by the corrosive digestive action of HCl, as occurs in a person who by

constitutional endowment makes excessive and continuous gastric acid secretion. Thus the etiology of peptic ulcer probably is connected with the alarm reaction.

Here are seen the outlines of a great biological chain reaction which can be set off by almost any form of stress and which may frequently lead to the suicide of the animal. Some of the links are still missing. As a result, large-scale research is being carried on in many laboratories. Figure 2 shows in a diagrammatic graphic form most of the actions and reactions herein discussed.

If further study confirms the application of these animal experiments to the human, it would appear that the most frequent and often fatal diseases of man are due to the wear and tear of modern life. The reaction of the body depends upon the degree and type of the stress and upon the resistance to the stress. Selye thinks that the following conditions, in addition to nephrosclerosis and hypertension, should also be included among the diseases of adaptation, periarteritis nodosa, certain rheumatic and gouty diseases, eclampsia, some types of diabetes, some types of acute infections, and possibly other conditions.

Conclusions and Comment

One might ponder that stress today is mostly a result of our sheltered lives and many comforts; our modern labor-saving devices, clothing, heating, as well as government promise of social security without working, all have rendered many people more vulnerable and sensitive to slight stress. That which was a mild stress to our ancestors now frequently is a major crisis. Moreover, the modern attitude toward life situations apparently causes more emotional conflicts, frustrations, anxieties and repressions, all of which are equally as damaging as physical injury. The modern world of economic and political insecurity, government-instigated inflation and war, also causes formidable stress. We live under constant strain and are losing our ability to relax and to be happy without fresh physical or mental stimulation or relaxing drugs.

Thus it would not be surprising that much of our organic disease derives from psychological trauma, with the general adaptation syndrome as the mechanism of action. If this be true, the function of medicine will be to find a shock-absorber for the consequences of stress; but prevention of stress is a task that lies beyond the reaches of medicine.

References

1. Albright, F.: Alarm reaction. Harvey Lecture, 38: 123, 1943.
2. Albright, F.: General adaptation syndrome. Conference on Bone and Wound Healing, p. 12 (Mar. 13) 1943.
3. Browne, J. S. L., and Vennings, E. H.: The response of the adrenal cortex to disease and trauma. Tr. A. Am. Physicians, 50:15, 1949.
4. Cannon, W.: The Wisdom of the Body. New York: W. W. Norton Co., 1932.
5. Conn, J. W.: The mechanism of acclimatization to heat. Advances in Internal Medicine. New York: Interscience, 1949.
6. Goldblatt, H.: The Renal Origin of Hypertension. Springfield: Charles C Thomas Co., 1948.
7. Grinker, R. R., and Spiegel, J. P.: Men Under Stress. Philadelphia: Blakiston, 1945.
8. Ingle, D. J.: Effects of stress. Endocrinology, 46: 67, 1950.
9. Keys, A.: Biology of Human Starvation. Minneapolis: University of Minnesota Press, 1950.
10. O'Connor, J. H.: General adaptation syndrome. Tufts, M. J., 14:3, 1947.
11. Page, I. H.: Pathogenesis of arterial hypertension. J.A.M.A., 140:451, 1949.
12. Selye, Hans: Stress. Montreal: Acta Endocrinologica, Inc., 1950.
13. Selye, Hans: Textbook of Endocrinology. Second ed. Montreal: Acta Endocrinologica, Inc., 1949.
14. Selye, Hans: The general adaptation syndrome. J. Clin. Endocrinol., 6:117, 1946.
15. Stern, H. J.; Bader, R. A.; Eliot, J. W., and Bass, D. E.: Hormonal alterations in men exposed to heat and cold stress. J. Clin. Endocrinol., 9:529, 1949.
16. Thorn, G. W.: Adrenal Insufficiency. Springfield: Charles C Thomas Co., 1949.

MSMS

DEFINITION OF BUREAUCRACY

This anecdote in a recent sermon by the Rev. Kenneth W. Sollitt, pastor of the First Baptist Church, Mendota, Ill., caught our eye:

"I was once in a small hotel in Vermont when one of the guests, a foreigner unfamiliar with American ways, brought the proprietress of the inn a beautiful bouquet. The proprietress was delighted beyond words—until she discovered that her gallant guest had picked the flowers in her garden back of the inn.

"Whenever government hands you a bouquet, you can be perfectly sure it was picked out of your garden. But we go right on accepting bouquets in the vain hope that some day we will get flowers that somebody else planted and brought to bloom."

And that is a precise definition of bureaucracy as we see it today.—*AMA Secretary's News Letter.*

Myotonia Congenita

Report of Four Cases in One Family; One With Autopsy Findings

By William Henry Gordon, M.D.
Jack M. Kaufman, M.D.
Harry A. Kashton, M.D.
Detroit, Michigan

"TONIC SPASMS of voluntary muscles in consequence of an inherited disposition" was Thomsen's original description of the disease process now known as myotonia congenital.[22] A few years preceding his description, Bell and Benedict briefly described this condition. Leyden also preceded Thomsen in describing this syndrome. Thomsen, who suffered from the disease, reported twenty-three cases in 1876. His son, a victim of myotonia, had been shabbily treated while in military service because of mistaken ideas of the nature of the disease. Thomsen drew attention to the cramps which occurred on voluntary contraction; onset in childhood; its distribution through the voluntary muscles, and its hereditary nature, as demonstrated by its occurrence through several generations of his own family. The first systematic attempt to study the disease was made by Erb. He described an increased irritability of the muscles in response to galvanic, faradic, and mechanical stimulation. This he believed to be characteristic of myotonic muscle and he called it the myotonic reaction. He was first to report morphological observations in this disease.

The etiology of myotonia congenita has long been in dispute. Several theories have been formulated. The two of foremost prominence are those of intrinsic disease of muscle and a disturbance in the excitability of motor end plate causing abnormal neuromuscular transmission. There has been some discussion about the presence of excess acetylcholine or a decreased amount of choline esterase. This has been disproved by many observers.[15] It has also been observed that blood transfused from a myotonic individual to a myasthenic caused no change in myasthenia gravis. Lindsley and Curnen[11] presented the theory that myotonia is a neurogenic rather than a myogenic phenomenon and he believed that continued contraction is of reflex origin; this being due to persistent discharge of hyper-excitable end organs in muscles. However, it has been shown that spinal anesthesia does not abolish the myotonia.[10] Therefore, it is unlikely that myotonia is of reflex origin. Wolf,[25] one of the foremost workers in the field, is of the opinion that the etiology of the disease must rest with neuromuscular transmission; the threshold of the end plate being lower or the excitation wave being more slowly destroyed. Wolf was also the first to point out the ability of quinine to relieve the difficulty in muscular relaxation of patients with myotonia. Convernton and Draper[5] present interesting analogies between state of contracture of muscle and myotonia. Contracture has been extensively studied in animal muscle preparations. Contracture has been defined as a state of contraction in muscle which persists for an abnormally long period after the stimulus for its production has been removed. Thus, contracture differs only in nature and duration of the protoplasmic excitation; the metabolism is the same. It has been suggested that the tendency to contracture may be associated with ontogenetic and phylogenetic antiquity of the muscle structure.[20] Accordingly, myotonic reaction might be associated with a primitive evolutionary state of muscle to a more embryonic type.[23] Actually, contracture has other similarities to myotonia in that both contracture and myotonia are improved by repetition of muscular activity and quinine, and exacerbated by prostigmine. Some authors stress that these conditions cannot be humoral because only certain muscles are involved. While this is certainly true, it is equally true that humoral mechanisms may have different target organs.

Emotional upsets and exposure to cold seem to have an adverse effect on myotonia. This is thought to be due to vasoconstriction in the peripheral extremities.[24] Epinephrine given parenterally or endogenous excess has the effect of causing peripheral vasoconstriction and vasodilatation of vessels in the muscle substance. Vasodilatation then may cause an excess of acetylcholine to be liberated. It has been shown that sympathetic fibers supplying blood vessels in muscles may liberate acetylocholine. The muscle then may react in myotonic manner.

We have been interested in the endocrine implications and associations of myotonic diseases. This interest was first stimulated by the sudden death and subsequent necropsy findings in a young medical associate with myotonic congenita. His death, following a mild upper respiratory infection, was

apparently precipitated by acute adrenal insufficiency. A more detailed description will be found in our case reports. A fairly comprehensive review of the literature did not reveal any similar reports; nor have any authors incriminated the adrenals in association with myotonia. However, there have been scattered reports of endocrine aberrations and associations with the myotonic state. Lord reported a case of a white woman, aged twenty-three, who had periodic myotonic difficulties at the menses. Once menstruation began myotonia would disappear.[12] Gardiner, at the turn of the century, reported a case of a woman who had myotonic difficulties during pregnancy which cleared after delivery. Her child, however, developed myotonia.[8] Fraink, in 1917, reported a case of myotonia congenita which was improved by the administration of thymus.[7] This is of interest insofar as in myasthenia gravis, which has been considered to be the antithesis of myotonia, a persistently enlarged thymus is frequently found. Actually, the field of endocrinology is still only partially explored. Eventually we feel that the endocrines will be proven to be inter-related with all metabolic and enzymatic reactions of the body. If we could understand these processes, we would then be able to explain and treat various diseases with much greater discernment. An indication of this is the role of potassium in myotonia and myasthenia. Myasthenia is made worse by potassium administration, myotonia is ameliorated. This is all intimately tied in with creatine-creatinine metabolism, which has been proven to be of great importance in muscle contraction.

"The capacity of muscles for contraction is related to their phosphocreatine content; the force of contraction is proportional to the extent of breakdown of the latter, and restoration of excitability in the muscle after contraction is dependent upon re-syntheses of the hydrolyzed phosphocreatine.[2] Creatine is present in the urine of prepuberal children, during pregnancy and the puerperium, but is absent from the urine of adults on normal diet (rarely present in adult females). Excessive creatinuria appears rather consistently but not invariably in adults with myotonia congenita. In this respect it is interesting to note that physiologic creatinuria of infancy disappeared in myotonic infants. However, in these same infants when given thyroid, physiologic creatinuria was re-established and they improved noticeably. These results could not be duplicated in adults. Moreover, diets high in protein and creatinuria caused by intake of aminoacetic acid could not accomplish symptomatic relief.

So in brief summation of the pathogeneses the two prevailing opinions are: (1) that myotonia is primary either in the muscle per se or (2) in the myoneural junction, creatine-creatinine metabolism playing a rather devious role.

There are many variations of myotonia congenita. Many names have been applied to these variations including myotonia atrophica and myotonia dystrophica. The latter being characterized by presence of premature baldness, premature cataracts, muscular atrophies, endocrine disturbances (such as gonadal atrophy), coronary sclerotic[6] changes, in addition to usual myotonia. Since typical cases of myotonia congenita may progress to develop these other changes in later years, many people feel that they are simply variants of the same disease. Of course, if gonadal atrophy is present, propagation will be curtailed. On the other hand it has been mentioned that there seems to be an increased propensity for twinning in myotonia.[13] Thomsen himself had two sisters who were twins, one of whom was affected. The unaffected one became the mother of four sons, two of whom were twins. Myotonia, it has been noted, may become progressively worse with succeeding generations as is frequently observed in diabetes mellitus, and many other seemingly unrelated diseases. Myotonia also may lead to mental enfeeblement. In one family mentioned by Caughey there was a steady decline of intelligence in each generation.[3] The sex incidence shows some predominence among males. The disease is transmitted as a dominant factor. It is commonly observed that in myotonic families individuals clinically symptom free may show a myotonic reaction.

The myotonic reaction, as first mentioned by Erb, has also been useful in confirming the diagnosis of myotonia. The main characteristics of the myotonic reaction are the persistence and slow subsidence of contractions on faradic stimulation of nerve and muscle and the double reaction of muscle on galvanic stimulation. This is described as a quick contraction from nerve or motor point and a slow vermicular contraction or sustained contraction on stimulation away from the motor point.[18] The electrical reaction is the same in myotonia congenita and atrophica. There is a relative diminution of coarse striated muscle fibers

and a relatively increased proportion of slowly relaxing non-striped sarcoplasmic muscle fibers. The slowness of reaction is possibly related to the relative preponderance of non-striped muscle fibers.

Fig. 1. Characteristic position of hands in myotonia congenita. This picture is taken immediately after closing hands.

From the clinical viewpoint the symptoms of myotonia congenita are fairly characteristic. The onset is usually in childhood but may not appear until adolescence or later. The history is that of difficulty present only on voluntary motion. There may be a slow contraction, and a slow relaxation is characteristic. This slowness is present only at the start of a movement, with gradual improvement on repetition. Thus, on starting to walk the patient has difficulty in putting his leg forward. He must then stop for a second or two before he can move the other leg. After a few steps, the legs become limber and the patient is able to walk without difficulty.[14] Attempts at quick movements cause the greatest difficulties. On quickly getting up from a chair, the patient may fall flat on his face, being unable to get his legs moving in time to prevent this. Patients do well in sports activities in which they can keep moving, such as baseball; the afflicted are unable to get started on base-running after successfully hitting a ball. One of our patients is a baker, and describes his inability to knead dough when he starts in the morning because of inability to release the material quickly enough. However, after a short time, he is perfectly capable of keeping up with his fellow workers as long as he doesn't stop to rest. In this sense, he is a valuable employe. The symptoms of muscle stiffness as described are not usually progressive over the years, but do tend to persist. Physical examination reveals no evidence of muscular atrophy except late in the disease perhaps, as described previously. Usually these patients are quite muscular and sometimes there is actual hypertrophy but muscle strength is not proportionate to their size. A characteristic physical finding is the slow contracture with slow relaxation of a muscle, when struck with a percussion hammer. There may be a transient groove produced in the muscle when only several muscle-bundles are stimulated rather than the entire muscle.

Differential Diagnosis

The differentiation of myotonia congenita from the other diseases affecting the muscles is based largely on the following features:

(a) Presence of painless tonic contraction followed by slow relaxation on voluntary, mechanical or electrical stimulation of voluntary muscles. This can be readily ascertained by simply asking the patient to shake hands and having him quickly release the handshake. The slowness of relaxation thus manifested, created a rather characteristic appearance of the hand of such patient (Fig. 1).

(b) A history of familial tendency.

(c) Tendency towards relief of symptoms on repetition of contractions.

(d) Some authors have used the aggravation of symptoms by the giving of prostigmine to be of diagnostic value.

(e) Further relief with quinine is of diagnostic value.

(f) The absence of fibrillary contractions or fasicular muscular twitchings aids in differentiating myotonia from muscular disturbances of neurogenic origin.

Actually, the diagnosis of myotonic congenita is not a difficult one to make. The chief difficulty is that of nomenclature since this disease is frequently confused with the other muscular dystrophies in terminology. These include progressive muscular dystrophy and its various forms; amyotonia congenita or Oppenheim's Disease and

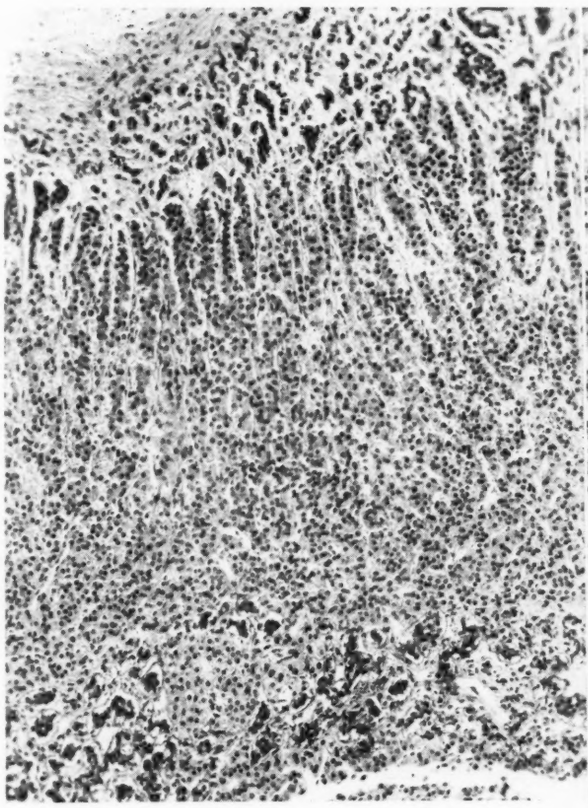


Fig. 2. Case 1. Hypoplastic adrenal cortex one-half normal; possibly related to the myotonic congenita.

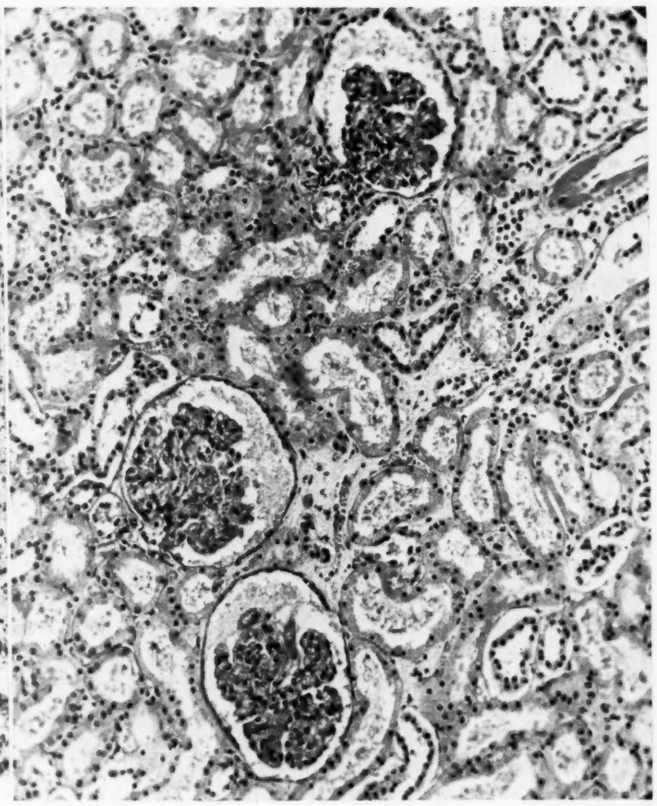


Fig. 3. Case 1. Kidney showing edema of tubules and glomeruli compatible with acute outpouring of sodium chloride.

myotonia atrophica. The first two are associated with muscular flaccidity and wasting; whereas, the latter is closely related to myotonia congenita in that it is hereditary, there is myotonia which is progressive and continues on to muscular wasting. It may represent an end stage of myotonia congenita as mentioned earlier in this paper.

From the therapeutic aspect, little can be said, since the disease is seldom incapacitating. Patients usually adjust quite well to their muscular malfunction and seldom require any specific therapy for the myotonus. However, since the discovery of quinine as an effective method of treatment by Wolf[25] in 1936, many patients have shown clinical and subjective improvement by taking five to fifteen grains of quinine three times daily. The rationale for this therapy lies in the curare-like action of quinine with diminution in effectiveness of neuromuscular transmission and diminution of the refractory period of muscle, nullifying the tendency of myotonic muscle to respond repetitively to any stimulus. Some patients prefer to keep their symptoms in preference to the side reactions of quinine (tinnitus, blurring of vision, and nausea). They may use the drug for occasions when improvement in myotonia is of special importance.[4]

Reports of Four Cases in One Family

Case 1.—W. J. W., a thirty-two-year-old white male physician, first developed symptoms of myotonia congenita in 1942. These were mainly those of weakness and marked increase in tonicity of hands, increased fatiguability, slowness of speech and movement, and drooping of facial expressions. These manifestations were ameliorated by exertion and quinine and exacerbated by inactivity, emotional excitement, and prostigmine. Past history was characterized by pneumonia and cholecystectomy in 1939. This disease did not interfere too greatly with the performance of his medical activities. On August 18, 1947, he complained of a head cold. The following day he had a rise of temperature to 103°, sore throat, aches and pains, "grippe," and respiratory distress. He was dead within five minutes from what was probably a combination of respiratory and adrenal insufficiency.

On post-mortem examination, the main feature of interest was the remarkable amount of thymus gland remaining, and the fact that the cortices of the adrenals were about one-third to one-half normal size and depleted of lipids. On microscopic examination, the three layers of the cortex were intact and the reticular layer seemed

most involved. There were no post-mortem autolytic changes. The spleen on gross examination was two to three times normal size, and it showed considerable pulp hyperplasia and prominence of Malpighian bodies but no infarcts or other pathological features. The kidneys showed on microscopic section considerable edema of tubules compatible with increased outpouring of salt.

Comment: What was so remarkable and tragic about this case was the sudden death of this young physician following mild upper respiratory infection; also the presence of myotonia congenita and its possible interrelationship. It seems to us that death was precipitated by acute adrenal insufficiency, following mild infection. A contributing factor was that the patient had lost a large amount of salt because of the very hot temperature and his excessive activity.

Case 2.—J. W., a white man, aged forty-seven, had symptoms which apparently started about twelve years ago. At that time, he noted gradual onset of weakness and spasticity of hands. This first affected him when he had to discontinue golf, because of inability to properly grasp the clubs. He has noticed weakness and mild spasticity of legs during the past few years. When walking, his gait resembled the slapping gait of early tabes dorsalis. However, he has shown no other neurological symptoms. Also, he has noted mild dysphagia which is described as a "dry apple sticking in throat." He suffered a traumatic cataract ten years ago which was operated upon. Physical examination was normal with the exception of premature baldness, spasticity of muscles of the hands, and a mild degree of increased tonicity of the feet.

This patient has been treated in the past with testosterone, amphetamine and vitamin preparations with indifferent results. Laboratory data: RBC 4,820,000. Hgb. 86 per cent. Color index .89. WBC. 6,500. Neutrophils 71 with 65 segmented forms and 5 stabs. Lymphocytes 21, monocytes 5, and eosinophils 3. Blood sodium 322 mgm per cent. Blood potassium 14.1 mgm per cent. Blood cholesterol 371.9 mgm per cent with 245.5 mgm per cent as cholesterol esters 68 per cent of total. Glucose tolerance curve: fasting .094; half hour 120; 1 hour .135; two hours .124; three hours .100. NCN 50. Blood Kahn negative.

Seventeen ketosteroids 6.9 mgm per twenty-four hours. Thorn test (giving four doses of 25 mgm ACTH at six-hour intervals) showed change in eosinophils from 171 per cm to 109 per cmm for 30 per cent drop.

Basal metabolic rate was plus 9, and electrocardiogram was normal.

Comment: This patient does not show a full blown picture of adrenal insufficiency but 24-hour eosinophile count after ACTH and low ketosteroids are suggestive of renal insufficiency. It is interesting in this individual that in addition to spasticity, weakness is one of the predominant complaints. This patient also showed some mental deterioration, which is a finding seen in this group.

Case 3.—J. W., thirty-three years old, a white man, first noted the onset of symptoms ten years ago. First manifestations of the disease process were mild spasticity of hand muscles and lack of ability to release objects immediately once grasped. This has progressed slowly but steadily since onset. At the time of examination, the patient was unable to relax grip fully for a period of fifteen to twenty seconds after shaking hands. No muscular atrophy was found. The remainder of physical examination was normal except for the facies. This was characterized by mild drooping bilaterally of eyelids, and paucity of facial expressions. In addition, his clinical course has been marked by occasional tingling in hands and feet. He has a past history of frequent upper respiratory infections and a right lower lobe pneumonia. There have been no cramping pains of his muscles, no marked weakness and no visual disturbances. He has two children who have been in perfect health.

Glucose tolerance test: fasting 106; half hour .180; one hour .156; two hours .131; three hours .115; Kahn negative. Blood chloride 596 mgs per cent as NaCl. Blood sodium 315 mgm per cent. Potassium 13.7 mgm per cent. NPN 35. RBC. 4,800,000 per cmm. Hgb. 86 per cent. WBC. 8,700. Neutrophils 72 per cent. Segments 70. Stabs 2. Lymphocytes 25. Monocytes 3. Eosinophils 1. Blood cholesterol 229.7 mgm per cent with 132 mgm per cent Esters. Twenty-four-hour 17 ketosteroids in urine revealed 5.7 mgm per twenty-four hours with the normal expected 8 to 20 mgms. Ketosteroids were determined by rapid chemical method of Robbie and Gibson.[19] Thorn test 156 eosinophils per cmm. followed by 25 mgm. ACTH giving 106 Eosinophiles per cmm. in four hours for a 32 per cent drop. By giving 25 mgm ACTH every six hours for four doses, a count of 122 eosinophiles per cmm. was obtained for a 22 per cent drop. Urine acid/creatinine ratio, however, was not in keeping with four-hour and twenty-four-hour eosinophil test. Many normal people were checked with normal Thorn test results.

$$\text{6 to 8 a.m.} \quad \frac{\text{uric acid}}{\text{creatinine}} \quad \frac{16.6}{78.7} = .20$$

$$\text{9 to 12 following 25 mgm ACTH} \quad \frac{\text{uric acid}}{\text{creatinine}} \quad \frac{45.9}{82.4} = .56$$

Uric acid with creatinine ratio would seem to indicate adequate adrenal function as borne out by a 100 per cent or more increase in ratio. Electrocardiograms were not remarkable except that they showed flat P waves with amplitude of 1 mm.

X-ray studies revealed heart within normal limits. Barium study of bowel revealed many diverticulae of descending colon.

Robinson-Kepler-Power test was negative. Quinine given 10 grains four times a day, relieved the symptoms of spasticity. 1 cc. of Prostigmine (1-1000+) given intramuscularly aggravated degree of spasticity. Testosterone has been previously used with value in these cases and was mildly successful on Mr. J. W., in that there was a sense of euphoria and some increase in muscle strength.

Comment: Diagnosis of myotonia congenita was

made by the clinical picture and family history. Because there was no baldness, testicular atrophy, muscular atrophy, cataracts and so forth, he was considered not to have myotonia dystrophica. Of course, some believe these forms are variants of one another. One of his brothers had died unexpectedly of an upper respiratory infection and had myotonia congenita. On post-mortem examination, adrenal hypoplasia was discovered. Therefore, investigation of the adrenal function on other members of the family was undertaken. The four-hour and twenty-four-hour eosinophil test performed with adrenalin and ACTH indicates adrenal hypofunction. This is collaborated by the low ketosteroid output in the urine. However, Kepler water test, uric acid/creatinine ratio after ACTH, normal glucose tolerance curve, slightly low blood chlorides and sodium would all tend to point toward normally functioning adrenals. Suspecting possible laboratory errors, several trial runs were carried out with satisfactory results.

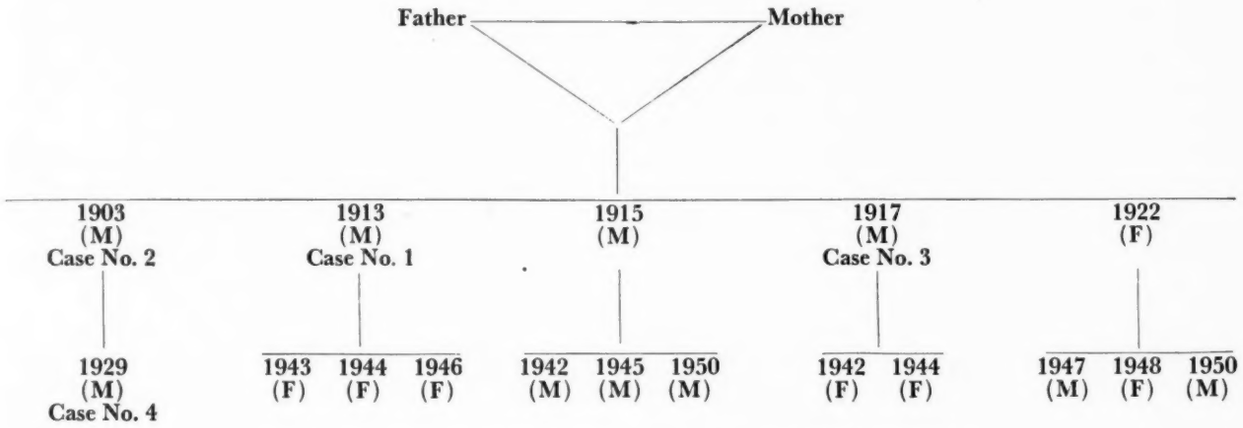


Fig. 4. Genealogical chart of patients reported in Cases 1 through 4.

Case 4.—M. W., twenty-one years old, the son of J. W. (Case 2), has a history which begins between the ages of eleven and twelve. At that time, he noted he was lethargic and was not as active as other boys. Subsequently, he noticed a mild degree of weakness, sleepiness, and spasticity of the hands. He had been treated with testosterone, amphetamine, thyroid, adrenal cortical extract, with little success. Lately, his symptoms had been easy fatiguability, weakness and spasticity of back. While in the Army (two months' service) he was unable to release a rifle after shooting. He is now working as a baker's assistant. His main difficulty occurs in the morning, but once his muscles have been used for any period of time, spasticity decreases. His speech is slow, movements slow, reactions slow (as in other members of the family). The only physical findings excluding muscular difficulty are generalized hyperflexia and hypotension, 90 to 106 over 40 to 68. Other members of this group have hyperflexia of varying degree. In November, 1946, follicle stimulating hormone assay of urine showed 26 mg.u (normal 5-50).

Seventeen ketosteroid urinary excretion was 6.4 mgm per twenty-four hours (normal 5 to 15 mgm per twenty-four hours). Basal metabolic rates on two instances in May, 1949, were minus 14 per cent and minus 20 per cent. In May, 1949, Kepler water test was normal. 17 ketosteroid 9.5 mgm per twenty-four hours and 11 oxysteroid 1.43 mgm per twenty-four hours. Blood sodium, chlorides and potassium were normal as was the glucose tolerance curve. Electrocardiogram showed low voltage of QRS with diphasic ST in CF4. The patient had been receiving thyroid for an extended period. The electrocardiogram was compatible with thyroid deficiency.

Laboratory examination on August 21, 1950, showed RBC. 4,690,000. Hgb. 13.5 gms. or 88 per cent. WBC. 5,400: Differential, neutrophils 42, lymphocytes 44, monocytes 2, eosinophils 22 (Patient had no allergic or parasitic history and stools were normal on repeated occasions). FBC .095; Serum Sodium 285 mgm per cent. Serum Potassium 13.95 mgm per cent. Urine negative. 17 Ketosteroids 11.7 mgm per twenty-four hours, 11 Oxysteroid 2.3 mgm per twenty-four hours. Direct eosinophil count 560 eosinophiles per cmm, after 25 mgm ACTH 470 eosinophils per cmm. Slit lamp examination: numerous individual small punctate opacities present deep to anterior and posterior capsules in both eyes. These were whitish and brownish in color.

Electrocardiogram showed low voltage. Patient was started on 200 mgm of cortisone for the first dose and then 100 mgm of cortisone I.M. daily for seven days. There was no improvement on cortisone treatment.

Comment: Low blood pressure, asthenia, weakness are possible clinical confirmations of lowered adrenal function. Drop of eosinophils of only 16 per cent would indicate adrenal hypofunction. However, with high initial eosinophil count usual 50 per cent drop is frequently not obtained. Use of various adrenal hormones including cortisone

did cause mild improvement. Quinine also caused some clinical improvement while prostigmine caused exacerbation of symptoms.

Discussion

Myotonia congenita, in itself, is not a common disease, as actually only a few people are afflicted. Moreover, those who have the disease are not totally incapacitated. The reason for writing this report is to attempt to stimulate interest in the inter-relationship between muscular disease processes and possible hormonal background. Changes in the adrenal glands will not uncommonly be found in any chronic disease. Thus, we have noted lowered 17 ketosteroids and other manifestations of altered adrenal function in such conditions as peptic ulcer, ulcerative colitis and even chronic myocardial insufficiency. It may be difficult to judge which is cause and which is effect. Stimulated by the finding of adrenal insufficiency in our myotonic physician we sought further confirmatory evidence. This was verified partially by minor drops of eosinophil count after ACTH and clinical evidence. We certainly do not feel justified in incriminating the adrenal cortex in the pathogenosis of myotonia congenita. We do feel this should be investigated further. Bardier and Bonne have shown from their studies that there is modification in the structure of the adrenal cortex after continued tetanization of muscles. We believe it possible that the creatine-creatinine metabolism is under the influence of adrenal secretions. Prolonged contractions would then be due to alterations in creatin-creatinine breakdown as influenced by adrenals.

Cortisone has been reported[21] to have abolished the myotonic response in two patients with myotonia dystrophica. The use of cortisone resulted in partial amelioration of myotonia in three of our patients.

Summary

1. Four cases of myotonia congenita are presented. One patient who died with acute adrenal insufficiency is reported with post-mortem findings. The other three had findings suggestive of altered and depressed adrenal function.

2. Possible relationship between prolonged muscular contraction states and adrenal insufficiency has been mentioned.

3. Cortisone was only partially effective in treatment of three of our cases of myotonia.

Bibliography

1. Bardier, E., and Bonne: Note sur les modifications produites dans la structure des surrenales par la tetanization musculaire. Jour. de l'anat. et de la physiol., 39:296, 1903.
2. Cantarow, A., and Trumper, M.: Clinical Biochemistry. 4th ed. p. 86. Philadelphia: Saunders, 1949.
3. Caughey, J. E.: Diseases of the lens. Tr. Ophthal. Soc. United Kingdom, 53:60-72, 1933.
4. Cecil, R. L.: Textbook of Medicine. 7th ed. p. 1535. Philadelphia: Saunders, 1947.
5. Convernton, J. S., and Draper, M. H.: A study of myotonia, with special reference to paramyotonia. M. J. Australia, 2:161-175 (Aug.) 1947.
6. DeWind, L. T., and Jones, R. J.: Cardiovascular observations in dystrophia myotonica. J.A.M.A., 144:299-303 (Sept. 23) 1950.
7. Frink, H. W.: Myotonia congenita. J. Nerv. & Ment. Dis., 45:349, 1917.
8. Gardiner, C. F.: A case of myotonia congenita. Arch. Pediat., 18:925-928 (Dec.) 1901.
9. Hinsey, J. C., and Gasser, H. S.: The component of the dorsal root mediating vasodilation and the Sherrington contracture. Am. J. Physiol., 92:679-689 (April) 1930.
10. Kennedy M., and Wolf, A.: Experiments with quinine and prostigmin in treatment of myotonia and myasthenia. Arch. Neurol. & Psychiat., 37:68-74 (Jan.) 1937.
11. Lindsley, D. B., and Curnen, E. C.: Electromyographic study of myotonia. Arch. Neurol. & Psychiat., 35:253-269 (Feb.) 1936.
12. Lord, S. A.: Two cases of Thompsen's disease and one transient myotone occurring in one family. Boston M. & S. J., 142:249-252 (March 8) 1900.
13. Maas, O., and Paterson, A. S.: Genetic and familial aspects of dystrophia myotonica. Brain, 66:55-86 (March) 1943.
14. Osler, W.: The Principles and Practice of Medicine. Edited by H. A. Christian. 14th ed. p. 1190. New York: Appleton-Century, 1942.
15. Poncher, H. G., and Wade, H. W.: Blood choline esterase in myotonia congenita and myasthenia gravis. Arch. Neurol. & Psychiat., 41:1127-1129 (June) 1939.
16. Poncher, H. G., and Wade, H. W.: Pathogenesis and treatment of myotonia congenita: further observations. Am. J. Dis. Child., 55:945-965 (May) 1938.
17. Poncher, H. G., and Woodward, H.: Pathogenesis and treatment of myotonia congenita. Am. J. Dis. Child., 52:1065-1087 (Nov.) 1936.
18. Quadfasel, F. A.: Mytonic reaction today. Psychiat. Quart., 19:198-218 (April) 1945.
19. Robbie, W. A., and Gibson, R. B.: Rapid clinical determination of urinary 17-ketosteroids. J. Clin. Endocrinol., 3:200-205 (April) 1943.
20. Ruckert, W.: Die phylogenetische Bedingtheit tonischer Eigenschaften der quergestreiften Wirbeltiermuskulatur. Arch. F. D. ges. Physiol., 226:323-346, 1930.
21. Shy, G. M.; Brendler, S.; Rabinovitch, R., and McEachern, D.: Effects of cortisone in certain neuromuscular disorders. J.A.M.A., 144:1353-1358 (Dec. 16) 1950.
22. Thomsen, J.: Tonische Krampfe in willkurlich beweglichan Muskeln in Folge van ererbter psychiscer Disporition. (Ataxia muscularis?), Arch. f. Psychiat., 6:706-718, 1875-76.
23. Tower, S. S.: The reaction of muscle to denervation. Physiol. Rev., 19:1-48 (Jan.) 1939.
24. Wells, H. M.: The effect of the circulation on the electrical resistance of skin of man. Quart. J. Exper. Physiol., 18:33-34 (July) 1927.
25. Wolf, A.: Quinine: an effective form of treatment for myotonia. Arch. Neurol. & Psychiat., 36:382-383 (Aug.) 1936.

Political Vandalism Versus the Rights of the Individual

By Clarence E. Umphrey, M.D.
Detroit, Michigan

IF WE RECOGNIZE confusion, dereliction, insincerity, unrestrained spending and ideologies of tyranny in our high governmental bureaucratic levels, it is our business to do something corrective. This does not mean that I am blaming any one political party. In fact, it may be necessary to form a new political grouping composed of citizens who recognize and deplore the fact that the machine politics of today is controlled by individuals and factions who think only of legalized crime and filching the public rather than serving our citizens. The people know what is going on, but they do not know how to stop it. Our honest citizens are looking for a way out of the mess in which we are becoming mired. Certainly, doctors cannot help solve this problem if they think only of medical care and its cost. We must work with the clergy, lawyers, engineers, businessmen, educators, labor and all others who are interested in a return to a sane incentive type of Americanism. I am proud of capitalism and what it has done for the American people. Everyone who owns property or is compensated for work done is a capitalist. If and when this ceases to be true, we shall have statism. The state will then rule by tyranny. Who wants tyranny? Those who deride capitalism. These people compose the 2 per cent of our population working day and night for Socialism and Communism. The difference between these two "isms" is only one of degree. Communism is communalism by force. The flag of Communism should be embossed with the picture of a labor camp. I wonder, then, how many of the members and fellow travelers would want to wave it.

In Michigan, we have an organization called CAP (Co-Operation with the American Public). It is the purpose of this organization to educate our citizens in those things which will produce good Americanism. For one thing, we believe, our colleges should have Political Science Departments that would train aspirants to public office on the highest professional plane. Those who choose to follow a political career should be thoroughly indoctrinated with the ideologies of Americanism. They should also know the destructive principles of Socialism and Communism, and how to combat them. They should be aware of how our government was established to maintain the individual's rights and that each division of government was so constructed as to prevent centralization of power. There is no reason why such an organization as CAP should not work as well for every other group or profession.

As a nation, we have developed a number of detestable characteristics which make creating a state of realism very difficult. We do a great deal of smug boasting about our democracy without knowing what it cost us or what it means to us. We talk freedom but are headed rapidly toward Socialism. We speak glowingly of "freedom of speech" and "the rights of the individual" without knowing how rapidly these same rights are being taken away from us.

Let us review our losses so far. We have lost most of our financial security. To a great extent we have lost our spiritual security. We have lost our physical security. No one knows what tomorrow will bring in the way of atomic, chemical or bacteriological warfare. Certainly, we are not protected against such an emergency. We have lost our political security. Of all our losses, I believe the losses of our spiritual and political securities to be the greatest. We are even led to believe that the laws and government, as set up by our forefathers, based on individual rights are obsolete and so we change them. We have even gone so far as to change the Ten Commandments. Many covet that which is not rightfully theirs, so the next step is to legalize through our government certain forms of theft. We have pushed the citizen aside and made a feudalistic baronage of our nation, which will soon be in a position to dispense with all rights of the individual.

We assume the attitude that all politics are dirty and beneath us, and many of us seem to feel that a donation to the Republican or Democratic Party acquits us of all responsibility. In one of the recent elections, only 44 per cent of those privileged to vote in Ohio exercised that franchise. Well, don't look down on the lowly Ohioan as a

Address of C. E. Umphrey, M.D., as President of the Michigan State Medical Society at the annual meeting of the American Association of Physicians and Surgeons, Indianapolis, Indiana, October 4, 1951.

poor citizen. In Michigan, it was even worse, only 41 per cent voted. In common parlance, I think that is a "stinking" type of Americanism. Perhaps, in view of such statistics, we deserve just what we are going to get, which is the police state, unless we overcome our lethargy. This, then, becomes every good citizen's job. We must stop statism. We dare not fail.

One of the projects undertaken by our CAP was getting out the membership vote at the last election. I am happy to report that because of this effort we were able to register a 97 per cent efficiency. Those who voted were also aware of the qualifications of those who sought to represent us on the political front. Politics need not be dirty and beneath us and will be so only if you and I permit it. Do you know those who presently represent us in the state and national legislature? If not, you should make it a "must" in the near future. You will be happy to learn that with few exceptions they are men and women of honesty and integrity who are doing an excellent job. Occasionally, they will make mistakes because they have been intentionally and cleverly misinformed. That is why those of us who have helpful information about the problems confronting our senators and representatives are duty bound, as good American citizens, to contact them. That is why you and I must know the facts. The American people have arrived at sane conclusions when fully aroused. We must give them facts and dispel lethargy. A few of our elective representatives have been placed in office through the efforts of minority groups. Their interests are not for the best of the citizenry. In fact, they do not need to think of what is best for the people for in the long run they will do what they are told to do. Those individuals are easy to spot and must be relegated to the limbo of a dead political past by us who exercise our franchise to vote. This emphasizes our duty to those who serve us well. Get acquainted with them. Offer them help and finally give them a pat on the back for a job well done. This will offset some of the pressure groups who are constantly making progress very difficult and life miserable for the legislators.

A few months ago I wondered whether my patients were interested in our political problems. I placed petitions in my office, offering those who were opposed to socialism, including socialized medicine, a chance to demonstrate their opposition by signing to reactivate American Principles of Freedom. In a short time there were 400 signatures. A similar procedure in every doctor's office in Michigan would create 2,400,000 Minute Men and Women. Each of us, no matter what his profession, must not underestimate his influence in rejuvenating Americanism; it is and will remain tremendous. There must be no lag in this program. When I hear someone say "but my effort won't amount to anything," I am pleased to remember the outdoor night lecturer who was confronted with that same statement. His reply was to ask everyone in that huge stadium to light a match when he counted three. No one in that audience will ever forget the brilliance of their combined effort.

In our public relations planning we must decide whether or not other emergencies exist. If so, are they singular or multiple? Are they external or internal? What defenses should we use and how can they best be prepared?

We know there is an external danger, and everyone is constantly aware of it. The trouble is that the external war we were so cleverly euchred into may be only a means to an end. If Communism can drag us into insolvency through our deficit spending, then Americanism will surely succumb to tyranny and statism. We have endured two world conflicts to maintain freedom and now are engaged in a third. Each conflict finds us closer to bankruptcy with an increasing acquiescense to Socialist ideologies. Thus our external danger becomes our internal danger. Twice we have gone through the routine of unprovoked attacks, primary heavy losses, prayer for divine guidance, American production gets rolling, supply lines established, brilliant victories, we win the war, but *We Lose the Peace.*

Ever since the beginning of history man has possessed some means of destroying his fellow man. In our so-called highly civilized countries the science of murder has been developed almost to the point where we can begin to look for what appears to be the desired end, extinction. I predict this will not happen. In this prediction I can rest assured that no one will come and say "I told you so," if I am wrong.

The great civilizations or nations which have reached the pinnacle of glory, have not been destroyed by war, but by the devouring vandalism of taxation. This always happens when John Q.

Citizen gives up his personal rights for security as provided by the State. Since the beginning of time very few have known freedom as exemplified here in America. Please tell me, then, why must we follow in the footsteps of Europe? No Peace —No Freedom—No Hope! The fear is not of atomic, chemical or bacteriological extinction, but that there will be a million tomorrows for you and me and our families of serfdom.

Is there anyone here who believes we do not lack leadership? Is there anyone who believes we are being guided by the principles laid down in the "Sermon on the Mount"? Are we thinking of our fellow man? These are some of the outstanding reasons why we need leadership. Why should we see published, day after day, pictures of faces surrounding the United Nations' conference tables expressing hate and distrust? If we wish to have our neighbors of other countries trust us, we must win a moral victory at home and live closer to the ideals we teach. If we can do this, the areas of despotism will shrink in favor of freedom of government based on the individual's rights. Communism now controls about 800 millions of the peoples of this earth. Those subscribing to our western ideas of freedom would number about 750 millions. The remaining 750 millions of Asia will not always remain neutral. If we can influence them to join us, and we can prove our efforts are truly for the good of mankind, we can win a bloodless victory.

So far, I have not discussed the results of our so-called lend-lease program. It would seem that it has fallen far short of its anticipated results. It has not greatly influenced Communism. It has not given us security. It has not provided us with allies. It has brought us much closer to bankruptcy.

I suppose no one knows what our national debt is at present, but it probably is crowding 300 billions. The interest on such an amount alone would have run the government, including Social Security Program, for twenty years at the rate of expenditures in 1915.

As to the federal debt mortgage, it means that every family in America is obligated to the extent of between seven and eight thousands of dollars. This should arouse us to the fact that federal aid is federal take. When we ask for federal security, we should be honest enough to admit we want something now that will be charged to our children, and they will be forced to pay later. I am reminded of the little old lady, who died in Minnesota and left $1,300.00 to pay off her share of the national debt. How chagrined she must be from her spot in heaven to realize that her noble effort had fallen at least $400.00 short.

One of the conditions that we feel has caused a laxity of close federal supervision has been the complete lack of an over-all auditing and accounting system. Never at any time is any one individual or a group of individuals in position to know what our actual financial status is. This was brought out in the Hoover Report.

We note with interest that within the past few years the number of Government units has increased from 350 to 1,812. It is a common charge that overlapping, duplication and waste with each bureau vying with the other for federal funds, has brought about a condition that is almost beyond any bookkeeping system. How could we expect to correlate records and reports delivered in carload lots?

In other words, we are creating a machine of such gargantuan size that eventually it will devour the holdings of all citizens it is supposed to serve.

Let us dwell for a moment on the effect this tremendous debt, with increase of taxes and inflation, has had upon our insurance. A $10,000 policy purchased in 1940 has strunken in protective value by at least 50 per cent. A typical life insurance holder today should have a planned estate of about $150,000. In five years, it probably will be $200,000 to offset a 25 cent dollar.

Let me give you another example. In 1936, the medical men of Michigan established a group budgeting system to provide for catastrophic medical care. It provided protection for the single person who earned up to $2,000 per year, and the married man who made up to $2,500 a year. It was thought that would cover 75 to 80 per cent of our citizens. By 1946, however, spiraling prices, increased taxes and inflation had reduced the number covered to approximately 30 per cent. Those who were receiving compensation above the limits set up ($2,000 and $2,500) could buy less for their dollar. Both employers and employes expressed their dissatisfaction in a very tangible way. Many contracts for medical service were dropped. After four years of study, a new plan covering those who earned $3,750 a year, if single, and $5,000 a year, if married, was approved. How

long will this plan be satisfactory? For but a short time probably, when it will be necessary to compensate for a 25 cent dollar. We are bound to follow the usual plan of inflationary disaster if we cannot curb this nonsensical spending being done by the Washingtonian bureaucratic institute of delirium.

In our discussion, we have not mentioned the Savings Bank book picture or those millions invested in Government Bonds. The handwriting on the wall is just as legible and draws the same conclusions.

Aren't these facts concerning our Federal Financing apparent to the millions who vote? In my opinion, they are not informed, and when they are, will demand a balanced budget.

Why should our Federal Government be in business where the huge losses sustained must be borne by the already overburdened taxpayer? I challenge anyone to name a well-run Government Federal Bureaucratic enterprise. Why should the Post Office lose 500 millions each year? Why should Government-controlled power industries lose 450 millions a year, while those under the egis of private enterprise pay taxes in a like amount? In spite of these facts, our Government, which now controls 200 power plants and dams, is planning on building 500 more. Many a taxpayer has helped support a Government Co-operative which has eventually ruined his own business.

Our Government is already in the banking business, financing endeavors from race tracks to soda fountains. It has built up a tremendous insurance business for War Veterans and their dependents. It is in the peanut, cotton, beans, turpentine, turkey and wool business. It buries thousands of tons of eggs underground to make you pay more. It owns at least two railroads, several barge lines and many merchant marine ships. It smelts metals, refines sugar and proposes to build steel plants. It operates scores of hospitals, hires doctors, dentists, oculists and surgeons. It is in the business of fixing wages, pensions, prices, profits, interest rates and dividends.

The above are a few of the blunders which ruined England. A few years ago Mr. Edwards, a past member of the British Parliament, came to this country to tell his friends why he was joining the Socialist Party and how he expected it to do great things for the public of England. In 1949, he returned to tell us how Socialism had ruined the British Empire and how if we do not control our present debacle Socialism and so-called American planning can bring nothing but financial ruin and compulsion to the United States. According to Harold E. Stassen, England ignored these encroachments too long. Are we doing the same thing? You know we are.

This pyramiding picture of Federal spending and bureaucracy has crept upon us insidiously. The first appropriation to a Federal Bureau in 1912 was less than $22,000. Now, more than $1,200 is spent annually by the Federal Government for every family of four, an increase of 4,038 per cent. Each family's share of the Federal debt has jumped from $50 to between $7,000 and $8,000—an increase of over 14,000 per cent.

In bringing these facts to our friends, doctors of medicine have had the co-operation of such organizations as the press, radio, television, Woman's Auxiliary, Michigan Health Council, labor organizations, churches and clubs. For their help, we are most appreciative. I have found that each of these organizations became alarmed when they were told that according to the Secretary of the Treasury Snyder we will spend 75 billions this year. More recently, that estimate has been increased by 25 billions. With a Federal revenue of 51 billions, our yearly deficit will be about 50 billions a year. Is there anyone here who does not believe our financial structure is tottering?

In our contacts with Labor, we must ever strive for those things that are best for those who work for compensation. If their leaders use tactics we cannot condone, we should not hesitate to take issue with them. The unions do not fear a strong centralized government. Apparently they feel they are big enough to direct statism, if it should materialize, to their own advantage. We do not agree with them and would direct the attention of labor leaders to the sorry plight of laboring classes in England at present. The medical profession believes in developing local government and preserving the rights of the individual. We will not bargain our freedom for any projected security. As long as there is a free America, we shall insist on protecting the rights of any minority group. Fundamentally, we cannot understand or condone many methods used in the unions' so-called bargaining.

A few months ago Mr. Reuther and Mr. Becker of the UAW-CIO invited a number of us to be

their guests at dinner. Following the dinner, Mr. Reuther opened the discussion with the statement that for bargaining purposes he would support the Murray-Waggoner-Dingell Bill, or some similar legislation, for complete medical care for the people he represented. Mr. Reuther was not only informed as to why we opposed socialized medicine, but why we opposed socialization and communization in general. He was told we opposed statism and why. We suggested that if he thought the unions were big enough to control statism that he regard carefully the sorry plight of labor in England. We reminded Mr. Reuther that he had been very loud in his decrying the horrors of slave labor during the last war. Before the evening was over Mr. Reuther said, "We are not in favor of socialized medicine any more than we are in favor of slave labor." He believed the next move should be a meeting of the national leaders in medicine and the national leaders in labor. One such meeting has been held. We hope they made progress. We believe the profession of medicine should always stand ready to discuss means of improving medical care and making it more completely available. Basically, we feel the unions fear statism as much as we do, and here rests the hope of future successful planning.

We should then be able to list our guiding standards as follows:

The Constitution and its bill of rights must be preserved.

Every individual's right must be protected.

State and local government should be free of federal financing and administration.

Taxpayers' money must not be used to compete with private enterprise.

Smear campaigns and intimidations must stop.

Washington Bureaus must stop spending millions for purposes of propaganda as disclosed by the Harkness Committee.

Stop inflation as it ruins insurance policies, bank deposits and investments.

We must protest the control of votes by offering federal aid for education, socialized medicine and public housing.

Research as exemplified by American leadership in all phases of services and commodities must be supported.

Stop thinking security instead of opportunity. The spenders in Washington can help the little fellow most by reducing his taxes and thereby increasing his opportunities to do those things he has always wanted to do.

We must show our citizens that medical care will advance faster, their protection will be cheaper while utilizing voluntary insurance, and that totalitarian, compulsory socialized medicine is not desirable.

While we work let us keep in mind that the Revolutionary war was won, the Government established and the Constitution put in force by a compact, highly intelligent loyal minority.

In our over-all planning, it may be a long time before the American people can entirely eliminate poverty. We must first eliminate greed. We must live closer to the principles and ideals taught by the greatest of all Healers, and remember, ideals are like stars to one lost in the desert. He may not succeed in touching them with his hands, but by following them he will reach his destination.

MSMS

WELFARE SPENDING EATS UP THIRD OF ALL PUBLIC FUNDS

One-third of all the money spent last year by Federal, state and local governments went for welfare programs, according to the United States Chamber of Commerce.

A survey revealed that approximately $23,000,000,000 annually was turned over to some 300 public welfare programs.

The Chamber said this meant that the equivalent of $565 for every taxpaying American family was given to a government charity, relief or welfare organization.

The Chamber said that "despite relatively full employment," one person out of every thirteen got a regular monthly payment from a government agency, not counting salary checks.

If farm programs are counted, one out of every nine persons gets a monthly check of one kind or another from some government agency.

Last September, the Chamber found 800,000 persons were drawing government unemployment checks. In this same month, the Social Security agency listd 6,000,000 persons to receive old-age or disability checks.

Other government checks went to 2,500,000 persons drawing survivors' checks. Some 5,000,000 persons were on government relief rolls.—*Free Press-Chicago Tribune Wire.*

Medicine Is Arming For Atomic Defense

By M. L. Lichter, M.D.
Melvindale, Michigan

THERE ARE no experts in Civil Defense. This is because our country has never lived through that crucible of experience from which experts are developed. While it is a fervent hope that our Nation will never be confronted with such a situation, it must be recognized that the possibility of atom bomb attack upon our civilian population is a real one. Man is capable of visiting untold horror upon man and this realism must be faced. Planning and preparation must be approached with deadly seriousness. Passiveness and panic are foreign to the American people and have no place in our thinking. Civil Defense is not a frivolous thing, nor an exercise in mental gymnastics for a few dreamy-eyed planners. It is a new way of life, something which will be with all of us in the forseeable future.

It is fortunate that among the members of the medical profession throughout this country there are some doctors of medicine with sufficient foresight and devotion to the responsibilities our profession has to the citizens to dedicate themselves to lead the way in planning the medical aspects of civil defense. It was such a group† that was called together, under the sponsorship of The Wayne County Medical Society, as representatives of the major cities in the nation, to discuss common problems in planning for Medicine's participation in civil defense. The County Medical Societies Civil Defense Conference, which was the first of its kind, was held in Detroit, Michigan, on December 15-16, 1951. The meeting was held in the nature of informal discussions on many important and troublesome points without any prepared speeches. There were no experts present: there was no one who knew the answers to the problems. All present entered into the dicussion, each citing his experience in attempting to find a solution to the situations confronting him in his own locality. It was surprising that, while the details of planning differed somewhat from one community to another, all met on common ground in that they faced common problems. It was gratifying to note the eagerness with which all of these physicians entered into the spirit of the conference, each desiring to learn from the experiences of others and willing to give of his thinking. It must be emphasized that all of these physicians were volunteers in this important endeavor of Civil Defense, each giving of his own time taken from hours when he should be relaxing from a busy private practice. Many had difficult transportation problems to overcome in attending the conference since the first severe winter storm began the day before. Yet in their devotion to the problem all of these difficulties were overcome.

During the course of the two-day meeting many points of mutual interest were discussed. It is not my purpose to detail each one of these, but rather to point out the thinking expressed in some of the more important problems, thinking which might be of interest to the medical profession at large.

(A.) *Role of the Physician in Civil Defense.*

There was no question that all physicians throughout the entire nation must stand prepared to participate actively in medical civil defense planning. This meant that all physicians must accept assignment in the civil defense organization and assist in training the huge army of non-professional individuals required to fill out the units to be formed. In many of the metropolitan areas, as in the Detroit area, the cognizant medical society has adopted as society policy the principle

---

Dr. Lichter is chairman of the Civil Defense and Disaster Committee, Wayne County Medical Society, Michigan.

†R. W. Bunting, D.D.S., Ann Arbor, Michigan; Henry F. Buettner, M.D., J. W. Davis, M.D., Baltimore, Maryland; Harrison E. Kennard, M.D., Boston, Massachusetts; Antonio F. Bellanca, M.D., Buffalo, New York; Earl H. Blair, M.D., C. Joseph Stetler (Mr.), Chicago, Illinois; Harry R. Mendelsohn, M.D., Cincinnati, Ohio; Roscoe D. Leas, M.D., Kathryn G. Gasker (Mrs.), S. P. Severino (Mr.), Cleveland, Ohio; Harrison Green, M.D., Frank B. Ramsay, M.D., Robert L. Tucker, M.D., Indianapolis, Indiana; Ralph E. Duncan, M.D., Carroll P. Hungate, M.D., James J. Connor, M.D., Kansas City, Missouri; Arthur G. Baker, M.D., Lansing, Michigan; Wm. F. Lamb, M.D., Louisville, Kentucky; Jack Q. Cleveland, M.D., Miami, Florida; C. G. Dunst, M.D., E. R. Krumbiegel, M.D., John Kadonsky (Mr.), Milwaukee, Wisconsin; Edith Johnson, (Miss), Minneapolis, Minnesota; W. S. Gibson, M.D., New Castle, Pennsylvania; J. Harold Austin, M.D., Philadelphia, Pennsylvania; T. L. Meador, M.D., Portland, Oregon; A. A. Brindley, M.D., Richard Hotz, M.D., J. F. More, Roscoe H. Snyder, M.D., Edmund A. Paulinski, D.D.S., Toledo, Ohio; Raphael Altman, M.D., C. P. Anderson, M.D., James E. Cole, M.D., General Clyde E. Dougherty, Louis Jaffe, M.D., A. F. Lecklider, M.D., Hartman A. Lichtwardt, M.D., Clarke M. McColl, M.D., Richard McKean, M.D., Donald McLean, M.D., Joseph G. Molner, M.D., Rudolf J. Noer, M.D., Joseph Posch, M.D., Paul Salchow, M.D., M. B. Stuecheli, M.D., Arch Walls, M.D., Joseph A. Witter, M.D., M. L. Lichter, M.D., Chairman, Detroit, Michigan.

that all members will participate in Civil Defense. As a result, in the majority of the metropolitan areas physicians have been assigned arbitrarily with every effort made to keep assignments as logical as possible yet with the full realization that all regions in the area must be covered. While most of the cities had made assignments on the previously mentioned basis, it was apparent that none had attempted as yet to have organizational meetings of the various units. It was further apparent that, with the exception of two or three cities, the profession as a whole had not reacted very favorably to the matter of assignments for the participation in the organizational phases of the problem. In the discussion concerning how to overcome this seeming apathy, several suggestions worthy of note were made among which were the following:

1. Organizing on a local neighborhood community level with each school being the neighborhood focus for organization.
2. Having assignments made at top level with these key people in turn recruiting physicians for their own unit.
3. No assignments should be made until a definite program has been developed and an intensive educational program carried out to acquaint the profession and the public with the overall plan. In some areas where the profession has been informed of the planning this seemed to offer no stimulation to general participation.
4. Setting up a skeleton organizational force only, relying upon some form of State or martial law which would force physician participation in the event of atomic disaster. However all agreed that Civil Defense is a civilian job and not one of military or martial law.

The general opinion was expressed that to some measure the apathy of the profession could be laid to the widespread conception that once atomic disaster struck military law would prevail and all previous planning would be washed out. This is not true. Such a procedure would be contrary to all democratic principles of our nation. The Federal Civil Defense Act recognizes this when it states "It is further declared to be the policy and intent of Congress that this responsibility for civil defense shall be vested primarily in the several States and their political subdivisions. The Federal Government shall provide necessary co-ordination and guidance."

It was the consensus of the group that all physicians must recognize their responsibility, must realize that in the event of widespread disaster the public would look to physicians for help. All physicians must recognize that in the initial phases of large scale disaster medical assistance is the most important thing. It was further the consensus of the group that the attitude of the profession as a whole was rather disappointing but it was felt that as planning proceeded more and more physicians would come forward and actively participate.

(B.) *Utilization of Other Professional Groups and Their Duties.*

It was felt that all ancillary professions would have to be up-graded. For example, it was felt that dentists, by their training and experience, could very quickly learn to take over many of the duties customarily performed by physicians. They could manage shock cases, administer anesthetics, give blood transfusions and other fluids, do suturing, handle minor fractures and many other duties too numerous to detail. Nurses, it was felt, should be used in a high professional capacity and could do many of the things ordinarily done by physicians. In many of the cities it was reported that nurses had organized their own groups and were ready to integrate them into whatever units might be formed. It was felt that pharmacists should be used in administrative capacities, handling of supplies and as members of treatment teams.

(C.) *Education of Physician and Other Professional Groups and Civilian Volunteers.*

The subject of the education of physicians and other professional groups and civilian volunteers, coupled with the problem of development of uniform treatment procedures, provided the basis for a considerable amount of very interesting discussions. As far as professional groups were concerned it was felt that the medical school was perhaps the best source for preparing information for postgraduate dissemination. In several of the areas the medical schools were participating most actively. In the State of New York, for example, representatives from the nine medical schools in the state met and developed a series of short lectures to be given to physicians throughout the state. In addition this group also considered the problem of uniform treatment procedures and kept working at this until a simple set of instructions was developed. It was pointed out by several of the dis-

cussants that uniform treatment procedure was most essential so that stockpiling could be kept as uncomplicated as possible and further that physicians, following a prescribed treatment guide, would be able to work with varying units under different conditions. The same would apply to ancillary professional groups since much of the planning is based upon upgrading them.

In discussing the training of non-professional personnel it was generally agreed that while the Red Cross Manual was the best source for this purpose, objection could be raised to it since a good bit of the material was considered irrelevant and too elaborate. However as a whole the experience with The Red Cross Manual had been good. It was the general feeling that as far as possible training in this group would best be carried out on a unit basis, that is after the civilian volunteers had been recruited and assigned. The group was impressed by the five point program suggested by the Chicago Medical Society as follows:

1. Anti panic.
2. Red Cross training for all adults.
3. Blood typings and identification for everyone.
4. Immunization against smallpox, diphtheria and tetanus.
5. Elimination of rats and flies.

Another point suggested in education of physicians was the utilization of hospital staff meetings as a medium for getting important information to physicians. However it was pointed out that little interest in this method was evinced in one of the areas which used this approach. It seemed that announcement of Civil Defense as the topic for a staff meeting offered a good excuse for non-attendance.

While in many of the represented areas planning for training of all groups has been progressing, it was the conclusion of the conference that educational programs should not go too far until a nationwide policy on training is established.

(D.) *Integration of Suburban Communities.*

This subject provided interesting discussion. As satellites to every large community there are many small communities all of which enter into the formation of a metropolitan area. Each one of these small communities apparently wishes to set up its own Civil Defense plan and to impress upon the others its strategic importance as a target site. The integration of each of these communities into an over-all plan has caused great difficulty in many of the metropolitan areas in this country. It was remarked that the Civil Defense Director in each wants the power or responsibility of placing the doctors in his community under his thumb and wants complete control of his community; that these communities were too interested retaining and obtaining individual recognition. It was felt that in each area there should be one over-all medical civil defense plan with advisory committees made up of some of the representatives from each community. It was further felt that small communities should be urged to co-operate and to appropriate funds and personnel so that the whole civil defense effort would be on a metropolitan basis and truly one of community participation.

(E.) *Psychologic Aspects of Civil Defense.*

The psychologic aspects of Civil Defense were considered as most important and very difficult to solve. It was felt that a very active public relations program designed to reach as many people individually as possible was most essential. The public must be made aware of what Medicine is doing in the field of Civil Defense and must be told what they in turn can do. The following suggestions were felt to be most important in combating panic and hysteria.

1. Give every man, woman and child a specific job to do and then train them in advance so well that they can carry out this job under stress with complete confidence.
2. Carry on a constant educational program to counteract previous propaganda on the atomic bomb, particularly pointing out that there is a defense against this weapon and that it is possible for people to live through a bombing by following certain rules.
3. Prevent the hysterical person from contaminating others.

The purpose of this conference was to enable physicians the opportunity of finding out just what others were confronted with in developing a medical organization in Civil Defense. Conferences had been held at higher levels notably at the state level and national level. It was felt important that the people who are actually doing the work at the local level were not receiving enough guidance in the development of specific detail necessary in

(Continued on Page 208)

Pediatric Problems Arising from Atomic or Biological Warfare

By Franklin H. Top, M.D.
Minneapolis, Minnesota

THE TITLE of this paper would appear to imply that past experience has furnished information which can be discussed with assurance and the finality of a topic like "Reactions Following the Use of Penicillin." Fortunately for the human race, but unfortunately for the development of the assigned topic, relatively little experience can be brought to bear on the subject and although atomic bombs were used at Nagasaki and Hiroshima, information gained was limited; subsequently, it was added to by data from postwar studies on the effects of atomic bombing in Japan[18] and by control experiments in the Pacific. To date, biological warfare has not been utilized and any discussion concerning pediatric problems resulting from its use must be accounted as largely in the realm of speculation. However, on both phases of warfare certain broad statements can be made and implications drawn.

Atomic Warfare

Atomic warfare utilizes atomic energy produced by atom splitting to explode destructive materials.[5,17] To date, bombs have been used for this purpose and atom bombs cause more destruction than do others using different mechanisms for explosion. The damage inflicted by any bomb on humans is in general the same for adults and children and the atom bomb is no exception in this respect. The number of casualties due to the A-bomb are greater than those due to other bombs but it is still a matter of degree for the height in the air at which the explosion occurs, aggregation of people, the construction of buildings, the amount of inflammable material among other conditions increase or modify the amount of damage done. The atom bomb has three destructive actions, namely:

1. *Blast effect*—which is much greater than the most effective ordinary bomb.
2. *Heat ray effect*—much more intense than the most destructive ordinary bombs.
3. *Atomic ray effect*—not present after an ordinary bomb explosion.

A word about each of the effects is in order after a few general facts gleaned from the Japanese bombings are mentioned. Explosion of an A-bomb without prior warning over any given inhabited spot would likely result in chances of survival by reason of position as follows:

1. Directly under the bomb—the epicenter—practically no chance of survival.
2. Within ½ mile of the epicenter—10 chances in 100 of survival.
3. From 1 to 1½ miles from epicenter—85 chances in 100 of survival.
4. From 1½ to 2 miles from epicenter—97 chances in 100 of survival.
5. Beyond 2 miles from epicenter—an occasional death occurs.

In Hiroshima, slightly more than half the people survived, and at Nagasaki 70 per cent of the people one mile from the damage center lived to tell about it. The danger of injury is far greater than the danger of death. *Blast effect* is accountable for more than half the deaths and injuries and results from being tossed about or struck by falling or flying objects. *Heat ray effect* causes flash burns by means of heat generated by the explosion of the A-bomb—nearly one-third of the casualties in the Japanese bombings were due to flash burns. Burns may be fatal if contracted near the epicenter and serious burns may occur as far as five miles away. Contrary to general opinion, the *atomic ray effect* is least destructive, accounting for only 15 per cent of the total deaths and injuries in Hiroshima and Nagasaki. With the exception of underwater or ground explosions, radioactivity from atomic bursts causes less harm than blast or heat effects. Roughly, there are two kinds of radioactivity produced by atomic explosions. The first and most important in airbursts is the initial or explosive type of ray which is released quickly and dies out promptly—the danger to human beings lasts about one minute within a radius of one mile of the bomb burst. A fatal dose of rays is likely if a person is totally unprotected and within two-

Presented at the Eighty-Sixth Annual Session of the Michigan State Medical Society at Grand Rapids, September 27, 1951.

Dr. Top is Professor of Epidemiology and Pediatrics, University of Minnesota, School of Medicine.

thirds of a mile from the explosion center; under a mile some illness is likely to follow and over a mile away may result in temporary blood changes. Protection is afforded by concrete buildings that stand between an individual and the burst. Induced or lingering radioactivity is the result of penetration of metallic or other radioactive or holding objects which are penetrated by A-bomb rays. This phenomenon occurs within two-thirds of a mile from the bomb epicenter. Such induced rays, if concentrated enough, may do harm to humans. The first signs of ray effect are nausea and vomiting which may occur as early as two hours after a heavy dose; delayed symptoms, such as falling hair or anemia develop after lighter, but prolonged, doses. Individual reaction to ray effects plays an important role.

As noted above, survival is likely for a large number of individuals who experience an A-bomb burst. Injuries and crippling may result, burns may cause unsightly scarring and blood changes may incapacitate. However, survival will likely bring with it other effects which were noted after ordinary bombing episodes in World War II, namely war strain, which affects children particularly. War strain may manifest itself because children are in an area where bombing is frequent or because they are evacuated from the danger area away from home and parents. A considerable literature has developed from the British experience in this regard and there is no unanimity of opinion regarding the value of evacuation for children as against their remaining in bombed areas with their parents.

Bodman[2] reports a survey made by Dunston of 8000 school children exposed to bombing in Bristol, England, where air raids were occurring fairly often. Dunston found that roughly four per cent of the large sample showed some signs of strain following shortly after a series of severe air raids. Among 300 children showing evidence of strain 120 demonstrated psychological symptoms of aggressive behavior, nervousness, trembling or crying while over 170 suffered from psychosomatic disorders such as headaches, epistaxis, pallor, anorexia, indigestion, enuresis and soiling. The proportion affected appeared to be relatively small considering the type of trauma to which children were exposed.

Mons[13] states that the child exposed to bombing may suddenly become lazy, obstreperous, mischievous, a truant from school and unmanageable in evacuation billets. Burburry[3] finds from a comparison of reactions of evacuated and non-evacuated children, that there appears to be little relation between heavily bombed areas and anxiety about raids. Further, more complaints were received from parents concerning children's anticipation and talk of air raids and noise of sirens in evacuation reception centers than in bombed areas. Alcock[1] also showed that among evacuated children breakdown was often precipitated by the problem of separation from home and its protective authority; among 15,000 city-bred evacuees there were 420 cases of breakdown, most of them between the ages of seven and one-half and eleven and one-half years, while those children remaining in bombed areas were most affected between the ages of one and five and one-half years. Kimber[10] was struck by the effect on evacuated children of the threat by air raids to their parents left behind—the feeling of guilt in having run away from a danger their loved ones were still exposed to—a feeling found even in very young children. Burburry[3] concludes from her evaluation of evacuated children versus air-raid exposed children that whatever the ultimate outcome, the immediate effect of evacuation is worse than the immediate effect of air raids and that "the fantasy, waking or dream of the raid is provocative of greater anxiety than the reality."

What is the long term effect of air raid strain? Bodman[2] assesses this factor among Dunston's 300 children who showed signs of air strain in the Bristol raids. He finds that 61 per cent of the 300 children from among 8,000 studied were affected for a period of three weeks to two months, that after seven months, 11 per cent still showed persistent symptoms but that none did so for this long period of time who were under one year or over five and a half years of age.

Whether civil defense against bombing and atomic bombing will consist in evacuation on a grand scale or shelters at home, the experience of either will have a marked impact on children and result in definite psychological and psychosomatic strain in a number of them.

Thus far the threat of immediate death or injury and of the effects of war strain on surviving children have been mentioned. There remains the question of the anticipated greater hazard during periods of heavy bombing of an increase in infectious diseases as the result of disruption of adequate water supplies and proper disposal of sewage. Also the possibility of higher incidence of or the occur-

rence of outbreaks of the common communicable diseases among rural children with whom evacuated city children would come in contact. Glover[7] gives a comprehensive report of observations on the first four months experience after the great evacuation of some 1,000,000 children between September 1 and 3, 1939. A comparison is made with the four identical months of September, October, November, and December, 1938. The incidence of infectious diseases was remarkably low and out of all proportion to expectations.

The fall prevalence of poliomyelitis, diphtheria, scarlet fever, rheumatic fever, epidemic jaundice and enteric fever is well known. Diphtheria and scarlet fever had shown rather high attack rates in 1938 and recent preceding years so that a mixture of city carriers and rural susceptibles might readily precipitate outbreaks of these diseases. Poliomyelitis had been severe in England in 1938 and enteritis and dysentery had shown increases in the two months preceding evacuation. The outcome was favorable beyond expectations for the incidence of infectious diseases was remarkably low, except for impetigo and the nuisance infestation, pediculosis. Although evacuees received good medical attention, reported instances of diphtheria, scarlet fever and poliomyelitis were lower in number than for the similar period in 1938. There was no real increase in dysentery or enteric fever and a fall evacuation was a happy circumstance as regards infections such as whooping cough, influenza, the common cold and measles. The reasons for such low rates are not too readily apparent but the following factors probably contributed greatly:

1. School instruction was carried on at first in two shifts so that half of the evacuees and local children were out of doors in good autumn weather while the other half were in school, thus exposure of native children to imported carriers was gradual and at a lower dosage level.

2. Only one-third of the anticipated number of children and women to be evacuated actually reached the rural reception centers—for evacuation was on a voluntary basis and air raids had not as yet occurred.

3. Many children began to drift back to the cities after the immediate threat of air raids did not materialize.

The disconcerting factor from the nuisance standpoint was the increase in the evacuated area of impetigo and pediculosis; fortunately the incidence of scabies was less than anticipated and ringworm was reported in very small numbers. To get a complete picture of evacuation and its problems and greater details concerning the diseases mentioned, Glover's article[7] must be read in its entirety. The report covers the first four months after evacuation but the result of invasion of hundreds of thousands of rural homes by city bred children did not result in the anticipated rise in incidence of certain infectious diseases and the experience during the remainder of the war was much the same.

In Germany also,[19] the expected increase in infectious diseases after excessive bombing did not occur and no explanation for this was readily apparent though the German population was, up to the last year of the war, in good physical state and had excellent hygienic standards for that period.

Bacteriological Warfare

Dealing with bacteriological warfare from the standpoint of restricted information concerning it and lack of actual reported field experience against the enemy, leaves much to be desired and makes one reluctant to make assertions. Informed individuals are of course sworn to secrecy and their publications merely touch on some of the more obvious implications and do not reveal whether there is a difference of opinion among them concerning the role of Biological Warfare in conflicts of the future. There is, however, lively controversy among those not actively engaged in the field of Biological Warfare. Opinions vary as to the feasibility of its application on a grand scale as against mere local nuisance or "morale-breaker" value. The basic differences have not been resolved even by the more recent attempts of Langmuir[11] on an epidemiological appraisal basis and that of Haas[8] in an article on medical aspects of Civil Defense.

The manual, "Health Services and Special Weapons Defense"[6] issued in December, 1950, by the Executive Office of the President categorically states, "an enemy could employ . . . biological warfare against us effectively." One must then choose his own position with relationship to the possibility or importance of this method of harassing or destroying the enemy.

What is biological and/or chemical warfare? It is an attack on the enemy utilizing germs, toxins

or chemicals, or, as the manual states[6] with reference to the agents available, "a wide variety of viruses, rickettsiae, bacteria, fungi, protozoa, and soluble toxins . . . might be employed." No mention is made of a hypothetical new agent of unknown characteristics or of "supervirulence" so that in this matter pure speculation enters into the reckoning.

Biological warfare presumably is directed at:

1. Producing a large number of casualties in cities, to create hysteria and undermine public morale.
2. Affect local groups to incapacitate key industries and individuals.
3. Cripple the food supply and thus undermine public morale.

The forms in which a biological attack might be made are two, according to the manual:[6] (a) by clouds of pathogenic aerosols released over large cities and (b) contamination of water and food supplies or the air of strategic buildings by means of sabotage. In the first instance, the aerosols might be released by emanations of a fine mist or spray containing organisms or toxins from a spray bomb or from a fixed dispensing unit on a submarine in coastal waters. In the second instance, besides sabotage, organisms might be directed at animals or at their food supply so that secondarily and more slowly it would deprive the enemy of food derived from animals or plants used by man for food.

A self-propagating epidemic might be started but this is seriously questioned because from past experience with known agents the history of epidemics does not furnish a premise for believing that such an outbreak can be initiated and if it were possible there is every reason to believe that public health and medical organizations could control it. A "superagent," then, and an uncontrollable epidemic can be dismissed from consideration at the present time. The problem, if it arises, will likely be limited to known disease agents and their old and perhaps new potentialities for effective use either by ingestion or inhalation. Langmuir[11] states that the scientific basis for assessment of the problem rests with epidemiological facts relating to common vehicle epidemics and airborne infections.

Common-Vehicle Epidemics.—Past experience with epidemics due to contamination of water and food supplies is ample to indicate how repeat performances could be caused by purposeful contamination of foodstuffs by the enemy. Before purification of water supplies became universal, epidemics of typhoid fever were numerous. The outbreak of amebiasis in Chicago some years ago also serves as an example. Foodborne outbreaks have occurred and are again possible particularly by inoculation of custards and foods that are moist and warm. Saboteurs may inoculate food readily by posing as bakers or by contaminating water supplies in the role of caretakers, janitors or employes of waterworks. In such instances, high attack rates might result among individuals who ingested such inoculated foods or water.

In addition to organisms, toxins derived from organisms or a variety of other bacterial or vegetable toxins might be employed. The toxins of Cl. botulinum are to the point and would act quickly but there are others whose action is delayed for days and weeks allowing an enemy agent plenty of time to disappear and leave few clues. Considered from the mass standpoint common-vehicle epidemics would have nuisance and morale undermining value but would likely affect relatively few people and here children must be accounted as susceptible as adults.

Airborne Infection or Epidemics.—The importance of air as a mode of spread has been a long-disputed question. Prior to 1890, both scientifically informed individuals and the lay public believed air was the dominant mode of spread of infection. During the era of bacteriology, roughly from 1880 to 1920, the idea was given less and less credence and rapidly disappeared. About fifteen years ago the idea was revived by British and American investigators and the outcome of their studies was responsible for advances in the disinfection of air by means of controlled ventilation, ultraviolet irradiation, dust suppression and glycol vapors. But the application of engineering methods to the control of naturally occurring disease in general population groups was disappointing. It remains to be proved that airborne infection is an important mode of spread of naturally occurring infections.

The mechanics of airborne infection have been better understood in the past decade and spread of infection by air has occurred as the result of:

1. Experimental demonstration by such workers as Dunkin and Laidlaw[4] in dog distemper; Lurie

and co-workers[12] in infection of rabbits with tubercle bacilli; and Rosebury and his associates[14] at Camp Dedrick, working with organisms causing undulant fever, tularemia and psittacosis.

2. Accidental laboratory infections which have for a long time been considered an occupational hazard and accepted as a calculated risk. The recent studies of Sulkin and Pike[15,16] on viral infections contracted in the laboratory indicates that many infections are possible by this means.

3. Penetration and retention of particles of proper size in the respiratory tract—the work of Hatch,[9] in this respect, is outstanding.

Time does not allow a more extended discussion of the above known methods by which airborne infections have occurred. The question is, can the enemy reproduce at will conditions known to cause airborne infection on a scale harmful to many individuals, utilizing no new principle or no new organisms. Perhaps the question is not whether it can be done but whether it is feasible. The methods could very likely be applied on a grand scale so that large clouds of contaminated or poisoned air would be produced but no one can predict appropriate weather conditions, the proper air level at which real harm will be done and the extent of attack rates. From our present knowledge concerning the possible role of airborne infection, it may be concluded that:

1. Biological warfare is possible but would likely affect a relatively small number of people—millions at once is nonsense.

2. No new diseases are likely involved—rather, new methods of spreading known diseases.

3. Toxins may be exceedingly potent but distribution to affect large numbers of individuals is difficult.

4. No single organism affects everyone.

5. Natural epidemics travel slowly in terms of control methods available to stop them.

6. The enemy might be more interested in making people sick than in killing them—sick individuals demand care, and can affect public morale more adversely than deaths.

Should biological warfare become feasible and a serious threat, the pediatric problems involved would be those resulting from:

1. Present known infections or intoxications—many of which are now amenable to control by inoculation or to treatment by use of sulfonamides or antibiotics—or to neutralization by serums or antagonistic drugs.

2. Complications arising from known infections and intoxications.

3. Psychological or psychosomatic strain induced by fear of biological warfare which would affect older children rather than the younger or by fear induced by actually seeing or experiencing an attempt, abortive or successful, utilizing any of the methods discussed.

4. Malnutrition resulting from lack of adequate food supplies or inaccessibility to them or through loss of animals or their food supply by enemy-induced animal or plant infections. Further, continued longterm strain occasioned by fear or worry may cause malnutrition through persistent anorexia, nausea or vomiting.

Bibliography

1. Alcock, A. T.: War strain in children—A debate at the Tavistock Clinic. Lancet, 1:121 (Jan. 25) 1941.
2. Bodman, F.: War conditions and the mental health of the child. Brit. Med. J., 2:486 (Oct. 4) 1941.
3. Burburry, W. M.: Effects of evacuation and of air raids on city children. Brit. M. J., 2:660 (Nov. 8) 1941.
4. Dunkin, G. W., and Laidlaw, P. P.: Studies in dog distemper. J. Comp. Path. and Therap., 39:201, 1926.
5. Executive Office of the President: Survival Under Atomic Attack. National Security Resources Board, Civil Defense Office. Washington: U. S. Government Printing Office, 1950.
6. Executive Office of the President: Health Service and Special Weapons Defense. Washington: U. S. Government Printing Office (Dec.) 1950.
7. Glover, J. A.: Evacuation: Some epidemiological observations on the first four months. President's address. Proc. Roy. Soc. Med., p. 399 (May) 1940.
8. Haas, V. K.: Medical aspects of civil defense in biologic warfare. J.A.M.A., 145:900, 1951.
9. Hatch, T. F.: Behavior of Microscopic Particles in the Air and in the Respiratory System in Aerobiology. Pp. 102-105. Washington, D. C.: American Association for the Advancement of Science, 1942.
10. Kimber, W. S. T.: War strain in children—A debate at the Tavistock Clinic. Lancet, 1:121 (Jan. 25) 1941.
11. Langmuir, A. D.: The potentialities of biological warfare against man. An epidemiological appraisal. Pub. Health Rep., 66:387 (Mar. 30) 1951.
12. Lurie, M.; Heppleston, A. G.; Abramson, S., and Swartz, I. B.: An evaluation of the method of quantitative airborne infection and its use in the study of the pathogenesis of tuberculosis. Am. Rev. Tuberc., 61:765, 1950.
13. Mons, W. E. R.: Air raids and the child. Brit. M. J., 2:625 (Nov. 1) 1941.
14. Rosebury, T.: Peace or Pestilence. Biological Warfare and How to Avoid it. New York: McGraw-Hill Book Co., 1949.
15. Sulkin, S. E., and Pike, R. M.: Viral infections con-

tracted in the laboratory. New England J. Med., 241:205, 1949.
16. Sulkin, S. E., and Pike, R. M.: Survey of laboratory acquired infections. Am. J. Pub. Health, 41:769 (July) 1951.
17. U. S. Army: What You Should Know About the Atomic Bomb. (Revised) A Message from the Surgeon General. Washington: Army Medical Dept., 1950.
18. U. S. Strategic Bombing Survey; Medical Division: Effects of Atomic Bombs on Health and Medical Services in Hiroshima and Nagasaki, 1947.
19. U. S. Strategic Bombing Survey: The Effect of Bombing on Health and Medical Care in Germany. Morale Division, Oct. 30, 1945; Second Edit., Jan., 1947.

MSMS

MEDICINE IS ARMING FOR ATOMIC DEFENSE

(Continued from Page 202)

formulating their plans. It was the opinion of all participants that a meeting of the sort sponsored by the Wayne County Medical Society was long overdue and the conclusion was that it has served a most useful and stimulating purpose. All were greatly encouraged. Although much needs to be done, a great deal has been achieved. As a matter of record, the group decided that a similar meeting every six months was most desirable. Before the conference was adjourned it was decided to hold another meeting in May, 1952, with the Chicago Medical Society as sponsor.

Perhaps the most heartening conclusion drawn from this conference is the fact that county medical societies throughout the major areas of the United States, each of which has a committee devoted to the effort, have taken an active and leading part in medical civil defense. Each society is co-operating closely with health department authorities in the development and implementation of planning. There are other civic agencies such as police, fire, welfare, and communications, to name a few, who are vitally interested and necessary in the complete plan. Their co-operation has been admirable. It is apparent that the governing body of each society recognizes the responsibility of organized medicine in this endeavor. A major problem is getting the individual physician-member to realize that without his full and active participation medical civil defense cannot function. If organized medicine does not do the job, there are other groups ready to step in and take over, to our detriment.

Remember, there are no experts—as yet—in Civil Defense.

MEDICINE AND MORTALITY

Medicine enters 1952 with justifiable pride in an astonishing record of reduced disease mortality and prolongation of human life. A recent quarter-century summary* shows, for example, a decline in over-all mortality amounting to 55 per cent for females and 42 per cent for males. Nor is this exclusively the result of improved infant and child health techniques. In the sixty-five to seventy-four age bracket, the mortality tumbled 25 per cent for males and 37 per cent for females. And when it comes to communicable diseases, the record is even more amazing. For instance, the death rate from communicable diseases in childhood has, in one quarter of a century, taken a 97 per cent fall! Even the "degenerative" disease category has shared in the falling death rate at all ages.

This makes us face 1952 with good heart and no little pride. But before we pat ourselves on our collective backs, it might be well to salute the many other workers in the health professions who have contributed to this gratifying record. Research scientists and dietitians, pharmacologists and surgeons, nurses and electronic engineers, public health officers and soil chemists, veterinarians and medical clinicians have all had a share in it. Much of the trail-blazing work in pharmacology and pharmacognosy has been done by the extra-ordinary American drug industry. Government too has helped, with money, protective legislation, clinical material and brain-power. It seems like a long distance from the test-tube and the guinea pig to the recovery of a dying child, but the connection is there. The magnificent progress of medicine is no idle boast, no empty propaganda, but rather a solid achievement translated into the fact that hundreds of thousands of citizens of all ages are alive now who would have been dead long since, were it not for modern medicine.

It looks as if 1952 is going to be a tough year in world politics and world economics. We doctors don't know much about either subject. And we suspect that the politicians and economists don't either. But in our own field—individual human health—we look forward to one more round of steady progress. May it be a happy new year to all the troops in our war against disease, death and injury!

**Statistical Bulletin* of the Metropolitan Life Insurance Company, 32:3 (Sept.) 1951.

Care of the Cancer Patient

By Harry M. Nelson, M.D.
Detroit, Michigan

A SERVICE PROGRAM which attempts to give aid to the patient with cancer must have the co-operation and approval of the medical profession. There is today a wholesome understanding among the physicians as to our purpose and our need for each other. Old suspicions are subsiding, perhaps in the face of a new threat, but whatever the reason, the American Cancer Society welcomes the doctor's growing awareness that we are not a thing apart from them but, on the contrary, are providing them with an opportunity for the expression of a community of action against cancer, without which its control will be long delayed.

At the present there is a greater appreciation of the importance of cancer in medical practice and a more widespread recognition of the doctor's social responsibilities to participate actively in its control than ever before.

Every community is faced with the problem of caring for the individual with long-term illness or the individual who requires terminal care. The sick man does not for the moment see the necessity for progress in medical science. He is primarily interested in humanitarian rather than scientific impulses.

The American Cancer Society program of lay and professional education is aimed, with increasing success, at uncovering and eradicating malignant disease in the early stages, and the research program intends nothing less than the ultimate elimination of cancer by discovering its cause and cures; there remains the very real problem about what to do for the person who has cancer today. Service to the cancer patient in need is, I believe, the most sustaining element in all that we do. It will not advance our knowledge of cancer's causes or bring about more effective treatment—research will do that. It will not save the most lives—education will do that. But at the present moment we will do well to give these patients kindly, sympathetic care as long as required.

This brings up the question as to what is the best method of managing the chronically ill with cancer. We, as a voluntary health agency, cannot provide adequate care to the approximately 4,500 people who die each year in our division. There are at all times in Greater Detroit approximately 1,200 terminal cases which require attention. We must plan and work with the medical profession in order that the sufferer may obtain the best possible hospital and home care.

The greatest needs in Detroit at the present time are more registered and practical nurses. Several of our large, approved hospitals which have complete radiological, laboratory and surgical facilities for taking care of all types of cancer patients have vacant beds, a tragic situation caused by lack of personnel.

The experience of the American Cancer Society throughout the United States indicates that where additional hospital beds must be provided, and nurses are available, there is no reasonable substitute for direct expansion of the present hospitals. For a substitute located at a distance would obviously be unsatisfactory and inhuman.

It would be more expensive to maintain since it would be necessary to keep in this kind of hospital all that is now provided in the general hospital. Competent physicians who have a selected interest in the various categories of disease should be encouraged as scientists to study their special problems through to the end. It seems, then, that it is sound planning to provide two beds in the present hospitals—the place we can still find so many of our challenging clinical problems—rather than to provide one bed in the general hospital and one bed in a terminal-care hospital at a distance. We should never place an osbtacle between the patient and the physician, and distance is certainly an obstacle. The trend is away from special hospitals and toward the absorption of specialties by the general hospital so that group medical care may be applied on a broad medical basis no matter where the patient happens to be located. It is becoming more definite that the care of the acute and the chronic must be united in a general hospital on a continuing basis as long as the need for a hospital bed can be proven. More and more physicians are willing to support and relieve hopeless, helpless cancer patients to the end.

It seems quite evident that the patient who can be safely cared for in his home should remain there to allow a more profitable use of beds by those who need them. In some instances a pro-

From the annual report given to the Southeastern Michigan Division of the American Cancer Society.

gram of home care can be offered by financial subsidy under extension service, through the hospital or a voluntary agency. The burden of care during illness which does not require the highly concentrated hospital facilities is returning in large part to its point of origin, the home. Thus the way to achieve individualization of care for the patient is often within the bosom of his family.

Because we believe one of the greatest needs in patient care today is trying to solve the nursing problem, the American Cancer Society has carried out in the past two years an experiment with the Visiting Nurse Association in Detroit. This organization has been granted $13,000 for a study in the training and use of practical nurse students in home care of patients with cancer. This experience has shown that practical nurses, when properly taught and supervised, have an important job to do in a public health nursing agency which carries a bedside nursing program. Patients with long-term illness, and their families, have mental and physical health needs which a public-health nurse can help them to meet. But the patient's need for nursing care is often so great that the nurse's time and energy are consumed and public health nursing aspects are neglected. Through assigning these cases to student practical nurses, more concentrated consecutive service was possible, and the professional nurse, relieved of responsibility for actually giving care, was available to see and give attention to medical, dental, dietary, recreational and vocational needs of the patient and of other members of the household. Families temporarily relieved of part of the burden had a chance to see what more complete care meant to the patient, and sometimes showed themselves to be more teachable and responsible than they had been considered. Patients were sometimes found to possess strengths not previously recognized. Sometimes remarkable progress toward improved family health, not previously considered possible, was made through the combined efforts of the professional and practical nurse. This was possible only when the role of each worker was completely understood, accepted by both and adequately filled. While this program is small, it is a good beginning, and we should encourage other organizations to aid in providing more nurses for home care and hospital care.

The program of home care which was started in the Montefiore Hospital in New York, January 1, 1947, is a model which we hope many divisions of the American Cancer Society will follow. During the first two years the New York City Cancer Committee granted $80,000 for its continuance. The average census during 1948 was 53.5 patients. They have been able to take care of many very sick patients in their own home and provide them with a high level of medical care. The patient benefits by being in a more friendly atmosphere and having the benefit of individualized care. The patient who is suited for home care, and who has at his disposal the facilities which can be provided for him, is much better cared for than he could be in any hospital regardless of the relative cost. The cost of the Montefiore home care is about one-quarter of the cost of hospital care.

Through our research, education, early detection, diagnosis, treatment and follow-up programs, there will be fewer cancer patients who will require terminal care. In addition to that, many patients formerly regarded as terminal can be treated by newer methods and rehabilitated. There are, then, three important objectives in a service program which aims to assist the patient with advanced cancer:

1. Utilize full community resources in state and county cancer *service* activities.
2. Assist present institutions in the establishment of cancer clinics and cancer diagnostic clinics.
3. Develop in co-operation with physicians a more comprehensive program of home care.

MSMS

Esophagitis is probably the most important precancerous lesion of the esophagus.

* * *

Gastric polyps may become malignant.

* * *

Achlorhydria should be recognized when attempting to decide if small ulcers of the stomach are benign.

* * *

Among precancerous lesions of the colon, polyps in general and chronic ulcerative colitis in particular seem to offer the greatest potential danger.

* * *

Thousands of women's lives would be spared each year if they would submit to a reading of their cervical cytology.

* * *

When ovarian tissue is suspected of malignancy at the operating table, radical and extensive surgical procedures should be carried out. A total hysterectomy is definitely preferred to the subtotal procedure.

Hematoma of the Rectus Abdominis Muscle During Pregnancy

By Melvin S. Dennis, M.D.
Detroit, Michigan

HEMATOMA of the rectus abdominis muscle during pregnancy is apparently an uncommon condition. Torpin in 1943 collected twenty-seven cases from the literature and added one case of his own, making a total of twenty-eight. To date, only thirty-four cases have been recorded in the literature. This condition no doubt occurs more frequently than is indicated by these figures, but because of its obscure nature and self limitation is not recognized.

The etiologic factors of hemorrhage into the rectus abdominis muscle are generally considered to be:

1. Trauma during pregnancy such as coughing, sneezing, vomiting or violent exercise causing overstretching of the muscle and rupture of the vessels. This is probably the most common cause.

2. Intrinsic disease of the muscle from infections, such as influenza or typhoid fever, arteriosclerosis or blood dyscrasia.

3. Idiopathic causes.

Multiparity seems to be a definite etiologic factor of this condition. Of thirty-one reported cases, Thomas found only three primagravidas and twenty-four multigravidas. In twenty of the cases he found that the condition occurred after the thirtieth week of pregnancy, suggesting that overstretching of the rectus muscle is possibly a factor.

The diagnosis of this condition is seldom made. Adam reports only nine of thirty-two cases correctly diagnosed prior to surgery. Depending upon the location of the hematoma, it is frequently misdiagnosed as other intra-abdominal disease such as twisted ovarian cyst, degenerated fibroid, ruptured appendix, abruptio placenta, ruptured uterus, or gall-bladder disease. The diagnosis would undoubtedly be made more often if the condition was kept in mind. A careful history is important in arriving at a correct conclusion since in the majority of cases reported there was a history of some trauma such as coughing, sneezing, straining or a fall. A large number of minor cases go undiagnosed as a rule because of the obscure nature of the pain and the speed with which they recover. Usually the pain goes by the name of muscle strain, and within a few days it subsides and the correct diagnosis is not made.

The treatment must be decided by the severity of the case. Thomas believes the conservative treatment is only justified so long as the general condition is good, and there is no increase in the size of the tumor or of the abdominal pain. The majority of authors favor the surgical treatment which consists in opening the rectus sheath, removing the clot and ligating the bleeding vessel. If there has been no extension into the peritoneal cavity, there is no indication for exploration of the abdominal viscera. If the wound is dry and no infection is present, closure may be done without drainage, but if there is much bleeding, it is best to drain. Antibiotics should be employed to counteract infection.

Torpin found a mortality rate of 15 per cent and suggested that perhaps half of the infants died. This figure, of course, included many cases that probably died because of no blood replacement.

Case Report

Mrs. A. G., a forty-five-year-old negro woman, was admitted to Herman Kiefer Hospital obstetrical pavilion on July 23, 1947. She was a para 4, gravida 6. Her last baby was a 5-pound stillborn male delivered in November, 1945. She previously had two spontaneous abortions of unknown cause. Her last menstrual period began December 29, 1947. The patient gave a history of having hypertension for twelve years and syphilis since 1934 with intermittent treatment until 1940. During her pregnancy she developed some increase of her usual exertional dyspnea and ankle edema but no other toxemia symptoms. Her chief complaint on admission to the hospital was pain in the abdomen and cough. One week before admission she developed an upper-respiratory infection with an associated cough. She noticed some soreness in the abdomen during the week following the onset of the cough, but the pain was never severe enough to necessitate bed rest or medical advice. On July 22, following a paroxysm of coughing, she experienced a sudden "burning pain" in the right side of her abdomen. The pain increased in severity and was aggravated by further coughing, causing her to come to the hospital for relief.

Physical examination on admission revealed a well-developed, obese, colored woman, appearing acutely ill. Her temperature, pulse and respirations were normal, but her blood pressure was elevated to 200/90. There was some enlargement of the heart. A soft systolic murmur was audible at the apex and pulmonic areas, and

frequent ectopic beats were heard. The abdomen was rounded and obese, and there was marked tenderness to palpitation over the entire right side. A poorly demarcated, firm, tender, fixed mass was felt on the right side extending from 4 centimeters above the symphysis pubis to 5 centimeters from the right costal margin. The mass was apparently not connected to the uterus which seemed to move independently of the mass on change of position. The fetal heart tones were audible faintly in the left lower quadrant and were timed at 160 per minute. The fetus was unengaged and was palpated in a transverse presentation. There was no tenderness on palpation of the uterus or the left side of the abdomen, but she did seem to experience more pain on attempting to raise her head from a flat position. There was slight pitting edema of the ankles and legs. The pelvic measurements were normal. Laboratory studies revealed a 3-plus albuminuria with occasional granular casts and white blood cells per high-power field. Her blood count on admission was 3,370,000 red blood cells with 62 per cent hemoglobin and a leukocyte count of 15,000. Sedimentation rate and blood chemistry studies were within normal limits. An electrocardiogram revealed only extra systoles. X-rays of the abdomen were taken on July 25 and August 8, and revealed the bones of a fetus about eight months of age in a transverse presentation. The placenta was not visualized. The clinical impression at this time was eight-month gestation complicated by hypertensive toxemia, hematoma of the rectus abdominis muscle, and transverse presentation. The patient had some clinical improvement with bed rest and sedation, but the pain in the right side of the abdomen continued. On August 9, cesarean-hysterectomy was done under general anesthesia. A 4-pound 2-ounce male infant in poor condition was delivered from a transverse presentation and expired seven hours after birth. A hematoma measuring approximately 25 cm. in length and 10 cm. in breadth was found to occupy the right rectus sheath. No attempt was made to evacuate the hematoma, but 15 cc. of dark hemolized blood was aspirated with a large needle.

Her recovery from this operation was uneventful. On August 18, lateral x-rays were taken of the abdomen in an attempt to outline the hematoma, but no mass could be visualized separate from the other soft tissue of the abdominal wall. On August 23, the right rectus sheath was opened under general anesthesia and approximately 1000 cc. of clotted and hemolized blood was removed from the lower two-thirds of the rectus sheath. No active bleeding vessels were found. A pack was placed in the lower end of the incision which was removed in 24 hours. The patient had an uneventful recovery, the incision healing without infection. On discharge from the hospital September 2, the abdomen was soft with only a moderate amount of induration over the area of the hematoma.

Summary

A case of hemorrhage into the rectus abdominis muscle during pregnancy is reported.

The etiologic factors are briefly discussed.

Due to the rarity of the condition it is frequently misdiagnosed as some other intra-abdominal condition.

Operation is the usual recommended treatment since conservative treatment always carries the risk of more bleeding from additional trauma.

Early and correct diagnosis of the severe type of rectus hemorrhage is emphasized in order to prevent maternal mortality.

References

1. Adam, G. S.: J. Obst. & Gynec., Brit. Emp., (June) 1947.
2. Thomas, R. C.: J. Obst. & Gynec., Brit. Emp., 52: 580, 1945.
3. Lorpin, R.: Am. J. Obst. & Gynec., 46:557-66, 1943.
4. Ashkar, P. A.: Lancet, 2:934, 1939.
5. Schroeder, K.: J.A.M.A., 93:814, 1929.

MSMS

THREE TOP UNIVERSITIES IN MICHIGAN AMONG LARGEST IN NATION

Michigan's three largest educational institutions—the University of Michigan, Michigan State College and Wayne University—all moved up in the national rankings during the past year.

The status of the Michigan schools was revealed in the annual report on full-time and total enrollments made by Dr. Raymond Walters, president of the University of Cincinnati.

In terms of full-time enrollment, the University of Michigan ranks as the fourth largest college in the country with an enrollment of 17,035. Michigan State College is ninth with 12,219 full-time students.

Last year, Michigan was seventh with 18,912 students and MSC was tenth with an enrollment of 13,692. No other Michigan institutions were listed among the top twenty-five colleges.

In terms of total enrollment, including part-time students, the University of Michigan ranks eighth with 19,685 students. Wayne University is fourteenth with 17,384 and MSC is twentieth with 13,837.

The decline in enrollments, reflected by the three Michigan institutions, was general throughout the country.

"The decline in enrollments reduces the income from tuition fees," Dr. Walters said, "and is heightening the effects of inflation which now imperil all of American education."

The report gave the following as "big ten" among American universities in terms of full-time enrollment:

1, University of California, 34,883; 2, Minnesota, 18,282; 3, Illinois, 18,036; 4, Michigan, 17,035; 5, New York University, 16,858; 6, Ohio State, 16,583; 7, Wisconsin, 16,142; 8, Columbia, 13,849; 9, Michigan State, 12,219; 10, Indiana, 11,752.—*AP, December 29, 1951.*

Surgical Treatment of Pain

By John Martin, M.D.
Chicago, Illinois

PAIN, being a symptom, is never treated directly by surgery unless the primary source of the pain cannot itself be removed. When it becomes necessary to treat pain directly, there are several definitely planned operations, based strictly upon an application of the anatomy of the nervous system, which may be applied safely for the treatment of intractable pain.

Because the nervous system is anatomically so organized that functional units are discretely placed, the accurate surgical application of a knowledge of such functional anatomy may be used for the control of pain by intercepting those neural pathways which conduct certain sensory impulses from the source of irritation to the location of conscious interpretation within the brain.

Very often the patient who is considered to need surgical relief from intractable pain is in a state of extremis. Often his outlook for life is very poor, as in the patient with a pre-terminal carcinoma. Often other extensive surgery has already been done, and analgesic drugs may have been given to the point of addiction. In such patients, the cessation of pain by any means is a welcome change for both the patient and all others concerned with him. But all patients with intractable pain are not suffering a malignant disease, so that if freed of the pain life could resume its normal course. In such a person it is important that the relief from pain be obtained with little or no secondary effects upon the person's otherwise normal self.

The surgical treatment of pain is best considered by a review of the few procedures of choice, rather than the almost endless list of possible pain states which are encountered.

1. *Peripheral nerve section* is rarely done. Most peripheral nerves serve a mixed sensory and motor function, and one would hesitate to sacrifice the motor component. Furthermore, most afflictions of individual peripheral nerves are successfully treated by the proper surgery locally where pain is a part of the disability. Under no circumstances should peripheral nerves to an extremity be cut, for to do so would be to destroy important tactile, proprioceptive, and other types of perception. Since peripheral nerves lie distal to the dorsal spinal ganglia they can and do regenerate, which may result in a recurrence of the pain, disagreeable paresthesias, painful neuromas, and phantom phenomena.

2. *Rhizotomy* is the intraspinal severance of the dorsal spinal root between the spinal cord and the dorsal spinal ganglion. In such an operation, therefore, one may selectively cut only the sensory components of the peripheral nerves to any selected number of dermatomes, and because of the anatomical site of the section regeneration can never occur. Again, such a procedure should never be done to the extent that an entire extremity is sensorily denervated. Rhizotomy is effective only for somatic pain, never for pain arising from visceral sources, unless, if done for the latter, the operation is extended over excessively wide levels. Rhizotomy is very useful for the control of persistent pain such as sometimes is present in the incisional scar of an old thoracotomy. For instance, if pain persists along thoracic segments seven and eight on the left side, dorsal spinal roots six, seven, eight and nine on the left could be severed with complete and permanent relief from the pain. Because of the anatomical overlap of the sensory supply from dermatome to dermatome, it is always necessary to cut the next highest and lowest dorsal roots above and below the dermatomes in which pain is expressed by the patient. In the instance of intractable pain about the neck, shoulder and face, as is sometimes present in carcinoma in those regions, sensory rhizotomy of the upper cervical roots on the involved side, together with section of the sensory root of the trigeminal nerve, will give complete and lasting relief. Thus rhizotomy is particularly useful for the relief of intractable pain of a somatic nature involving the neck and trunk. It is proper to add that when intractable pain develops along the course of one or several intercostal nerves, due to the effects of surgery, deep x-ray therapy, injury, or other causes, surgical severance of the nerves or their injection with alcohol, seldom gives lasting relief, and the recurrent pain may be more annoying than was the original.

Presented at the Eighty-Sixth Annual Session of the Michigan State Medical Society, Grand Rapids, September 28, 1951.

3. The operation called *cordotomy* consists of an incision within the spinal cord itself, with severance of the dorsal and ventral spinothalamic tracts, such incisions being made bilaterally and five to six segments above the highest level of pain. These tracts conduct the impulses of pain, touch, and temperature as they enter from the periphery, through the dorsal spinal roots, on their way upward toward the brain, and they exist as well delimited anatomical pathways within the antero-lateral quadrants of the spinal cord. The operation does not destroy the all-important proprioceptive senses, and may, if performed high in the cervical cord, be applied for the control of high thoracic pain. However, cervical cordotomy, particularly above the level of the origin of the phrenic nerves (which is cervical cord segments 3, 4 and 5), is not a safe procedure, the level of choice for cordotomy being at approximately thoracic cord segments two and three. Obviously, this is a more complicated and serious operation than rhizotomy, but it is done for more serious reasons. It may be used for the control of either somatic or visceral pain, and it is the operation of choice in most patients with intractable pain such as arises from abdominal or pelvic carcinoma, malignant tumors of the spine, sacrum or lower extremities, or for tabetic crises. Neither rhizotomy nor cordotomy should be done for the control of pain in a phantom extremity after amputation.

4. It may be that pain comes into consciousness in the thalamus and not the cortex of the brain, the cortex only serving to regulate it in degree. Pain is a primitive phenomenon, and logically it should have no accurate representation in the phylogenetically new cerebral cortex. Nevertheless, *ablation of the specific sensory cortex* has been done for the control of phantom limb pain, and the reports of the results vary from excellent to poor with only temporary relief. There is always such a large functional element in the pain of a phantom limb that the results of surgery for its control are difficult to interpret no matter what form of surgery has been employed. In this operation, performed under a local anesthesia, the post-central gyrus and adjacent parietal lobe is exposed, and the cortex is explored by electrical stimulation until the conscious patient complains of a reproduction of/or increase in his phantom pain. The gray matter for the corresponding limb is resected by "cold" sub-pial dissection. Three of five patients of my own so treated had immediate and lasting relief from their phantom extremity.

5. There are those patients for whom none of the already mentioned operations might be considered proper. This is especially true in the patient whose ultimate prognosis is not good, though life may be expected to continue for an indefinitely long time. If such a patient has become deeply addicted to drugs, or if there is an extreme state of tension, concern, and anxiety with the pain, then one of several methods of attacks upon the antero-medial nucleus of the thalamus may be employed. Such *thalamic destruction* may be carried out unilaterally or bilaterally, many excellent results having been obtained with the unilateral operation alone.

Surgical attack upon the thalamus was first devised as a treatment in certain of the psychoses, the purpose being to overcome the fears and anxieties of the patient. The cell bodies of the fibers leading to the antero-medial nucleus of the thalamus lie in the cortex of the antero-medial portion of the frontal lobe, and by the operation of resection of such specific cortical areas, sometimes called "topectomy," the desired depressive effect on the thalamus may be obtained. The same effect may be obtained by the original, equally effective, less complicated, less dangerous, and more popular operation of lobotomy, or, more properly, leucotomy, in which selected areas of the non-vascular white matter anterior to the lateral ventricle are severed under direct vision through trephine openings. A variation of leucotomy is done in some clinics by the euphemistically termed "ice-pick" method, wherein a sharp, pick-like instrument is passed through the upper conjunctival fold, through the thin roof of the orbit, and into the frontal lobe, where the white matter is severed by moving the handle of the instrument through the proper degrees in a coronal plane. Personally, I would not recommend this procedure. A more recent elaboration of the technique of thalamic destruction is through the use of a modified Horseley-Clarke stereotaxic instrument, which, when applied to the head, may be used to produce accurately placed electrolytic lesions within the antero-medial nucleus of the thalamus. This method is new, but it is a scientific approach of much merit and promise.

6. There are three specific types of primary

neuralgia wherein the pain is most severe, unrelenting, usually progressively disabling, and which have no known etiologic basis. These are, *trigeminal neuralgia, glossopharyngeal neuralgia,* and *sphenopalatine ganglion neuralgia.* The discussion of any one of these painful states would require considerable time to describe fully the clinical syndrome, the diagnosis, and the treatment. The pain of trigeminal neuralgia may be limited to the distribution of one, two, or all three branches of the nerve, and the only known permanent cure for this terrifying distress is section of the sensory root between the Gasserian ganglion and the point of entrance of the root into the pons. As in any other sensory rhizotomy, the nerve cut at this point cannot regenerate, but cut or injected with alcohol at any point distal to the ganglion, regeneration will always occur with renewed pain and paresthesias. The operation is conveniently done under a local anesthesia, or local anesthesia bolstered with a light general anesthesia for the moment of actual severance of the root, and it may be done regardless of the age of the patient. A supposed refinement of this operation is the severance of the descending trigeminal sensory pathway in the lateral surface of the medulla, near the olive, but this operation has never proved popular because of the many undesirable side effects of medullary disturbance which it has produced. Theoretically, section of the trigeminal root at that point destroys pain perception only, leaving undisturbed all tactile sense. Glossopharyngeal neuralgia is much less common than trigeminal neuralgia, but it is nonetheless severe. It is permanently cured, without any after effects whatsoever, by the intracranial section of this tiny nerve as it passes from its meatus in the antero-lateral wall of the posterior cranial fossa to the brain stem. Palatal or faucial numbness or weakness is never noted by the patient and rarely demonstrable by an examiner after the section of this nerve. Sphenopalatine ganglion neuralgia is a definite entity which can be proved by a therapeutic test of cocainization of the ganglion during an attack of pain and which can be cured by the destruction of the ganglion by surgical removal or by alcohol injection. It need never be confused with trigeminal neuralgia. If you wish to incur the ill will of a patient with such a pain, indicate to him that you have never heard of such an entity, or that text books pass it off as an indefinite sort of combination of intranasal pathology and functional distress, or that it was probably a figment of the imagination of a certain Dr. Sluder.

7. The intractable pain of angina pectoris, chronic pancreatitis, and certain peripheral vascular diseases such as Raynaud's phenomenon and thromboangiitis obliterans can be most satisfactorily and permanently stopped by the application of surgery to the proper segments of the autonomic nervous system. Often the organic changes resulting are of equal or greater benefit to the patient than the mere relief of his pain. But I should like to emphasize that in my opinion destruction of the autonomic nervous system for any reason must be considered carefully, for there seems at times to be a tendency to use such an approach as a panacea, or when nothing else seems to work. Based both on a knowledge of autonomic nervous system anatomy and physiology and clinical experience, such surgery, however, when properly selected and done with technical accuracy, has of recent years brought new hope and extended life to many severely afflicted persons.

MSMS

HUMAN BLOOD PRESSURE DETERMINATIONS

A revised guide for physicians in measuring human blood pressure, entitled "Recommendations for Human Blood Pressure Determinations by Sphygmomanometer," has been issued by the American Heart Association. It will shortly be available to physicians in booklet form through application to the Michigan Heart Association, 4421 Woodward, Detroit 1, Michigan.

The "Recommendations" booklet replaces the booklet "Standardization of Blood Pressure Readings," originally published by the Association in 1939. The revisions were drawn up by a committee appointed by the Council for High Blood Pressure Research of the American Heart Association, under the chairmanship of Dr. Carl J. Wiggers, Professor of Physiology at Western Reserve University School of Medicine, Cleveland.

In commenting on the publication of the "Recommendations," Dr. Wiggers said:

"The physician, and through him nurses and properly trained technicians, are being constantly kept informed of new discoveries which help to make blood pressure readings more accurate. The measurement of human blood pressure is still a comparatively new tool, the introduction of which is well within the memory of many of the older groups of practitioners. Recognizing that physicians were employing different techniques and criteria in measuring blood pressure, and too generally assumed that instruments sold were accurate, the American Heart Association in 1939 appointed a committee to crystallize the best available thought on the subject at that time by publishing a pamphlet entitled 'Standardization of Blood Pressure Readings.' This has resulted in more precise standardization of methods and has stimulated manufacturers to make improvements in apparatus."

"Since that time, more experience has been gained in laboratories and hospitals, resulting in even greater accuracy in measurement of human blood pressure. This has now been assembled in the new 'Recommendations.'"

First Use of Epinephrine (Adrenalin®) in Asthma

Wilfrid Haughey, M.D.
Battle Creek, Michigan

MY MOTHER SUFFERED very severely from asthma for a great many years. My father, Dr. W. H. Haughey, for several years had sent her to the Mackinac Island region the middle of August to escape the asthma. She was free from it in that region. My first year out of school, in 1906, she did not get started early enough, and developed an attack of asthma in such severe form that she was confined to bed. My father had done everything then known, with not much relief. She was getting so weak she could not raise her head, and we feared for her life.

Finally in desperation, my father asked me if there was not something I had been taught in school that could help. I remembered having seen one of the rhinologists use a new drug to relieve a stuffy nose, and mentioned it. We could not see any relation, but I reasoned that the asthma was a stuffiness of the bronchi instead of the nose, and what was good for one might be good for the other. I suggested that if we could apply the new drug, adrenalin®, to the bronchi it might help, but how to do it. We could not make a direct application, and a spray was clearly not indicated, for she could not inhale enough to carry the spray.

We succeeded in finding a bottle of the drug. It was marked for local application only, however, and that was not good. I remember making the suggestion that the only way to apply the drug to the bronchi would be by injection, and maybe that would not be helpful. However, after much discussion we decided to try. The next question was dosage. Up to that time, adrenalin had been used locally only. It was marked 1-1000, so we figured it might take quite a dose to get any results. We injected one hypodermic full, 20 minims.

This was done with fear and trembling, as we did not know what would happen, but we did know the patient was likely to die if something was not done. We explained this to her, but she begged for help at any cost.

We watched her. Within two minutes she quieted down, could breathe easily, and was perfectly happy. But we were not. We saw for the first time an anaphylactic reaction. She shook. She shook the bed, the house. She had a terrific chill, but she was breathing for the first time in days. This relief lasted for eighteen hours. When she became severely asthmatic again, she begged for another dose. After considerable hesitancy we decided to try again, but to use only half the previous dose. We knew it would not kill her, but feared for the shock to her nervous system from repeated reactions. The 10 minim dose threw her into a chill for just a few minutes instead of approximately an hour experienced from the first dose. The third dose was 6 minims, and that seemed to be about right to keep her comfortable for about twelve hours.

This occurred in August, 1906. In October of that year, the detail man from Parke-Davis came to the office on his regular visit and told us he had a new drug just being introduced, which would reduce swollen nasal mucous membranes. We told him of our experience. He promptly said the drug was not to be injected and was so marked on the label; however, he was going back to Detroit, and would report our findings. The next year Parke-Davis advertised the drug for the relief of asthma.

This we are positive is a Michigan First. No one had ever done it before, and we knew we were playing with fire, not knowing anything about the action of the drug when injected, or even if it could be injected. But the need was great, and we took a calculated chance, with results far beyond our expectations.

MSMS

BLUE CROSS-BLUE SHIELD COVERAGE AVAILABLE

Michigan Medical Service and Michigan Hospital Service will open enrollment again to members of the Michigan State Medical Society during the period of March 10 to April 10. The effective date of accepted applications will be May 1, 1952.

This is the one time of the year when members who are now enrolled may make changes in their contracts, add dependents, et cetera.

For the first time, the $5,000.00 family income limit plan of Michigan Medical Service will be offered to the members during this enrollment.

Each member and each enrolled office assistant will receive enrollment information by mail during the first week of March. Assistants of enrolled members are eligible for enrollment.

Know Your Government

By John B. Martin
Auditor General, State of Michigan
Lansing, Michigan

MR. CHAIRMAN and members of the House of Delegates, I am very glad to be here this morning to talk to you on the third element of your Formula For Freedom program, KNOW YOUR GOVERNMENT.

In Lansing, as your Auditor General, I see the problems of government coming across my desk daily, because most of those problems, in the last analysis, or in at least one analysis, are financial problems. So, sometimes I wonder whether, if we could apply some other formula, some other way of doing things, we could reduce them.

The other night when I got home I found my little daughter saying her prayers. I could hear her through the door. When she got through I said, "Suzie, you didn't finish. You didn't say 'God bless Mummy and Daddy.' You can add it if you want to."

There was a moment of silence, and then she said, "But I can't, Daddy; I've already hung up!"

In Lansing, and I am sure in Washington and other places where men struggle with the problems of government, we would like to be able to reach down and get a telephone and hold it to our ear and get some instructions from up on high as to what we ought to do about some of these tough questions. Of course, we can't do that. We have to solve them the best we can, with the best implements we have, with the honesty and integrity that we have in us, the best judgment we can apply, with the gathering of all the facts we can pull together, with all that we can do to give a right answer and produce the kind of government that people are entitled to.

There was a time when government was not very important in one sense. It was not very important to you and me and a lot of other people because it didn't seem to affect us very much. It was something rather remote. It was operated on a relatively small budget, and it did relatively few things. It provided relatively few services, and it just didn't affect people. So, occasionally they went to the polls and voted. Sometimes they took a good deal of interest in political campaigns, but government itself did not hit them very hard.

That isn't true today, and I don't have to elaborate on that. If you buy something, the prices that you pay are controlled. If you earn something, what you earn is controlled by what your taxes might be. If you do something—if you are a businessman and want some materials—you have to go to Washington for some papers that say you can have them. If you want to make something which has critical materials in it, you have to get a permit for that. If you are a farmer and want to plant crops, you will have to take an inventory of what the many aspects of the farm program may require you to do and may limit you in doing.

We are dealing with a big stake. As one of the previous speakers said, we are dealing with the whole question of freedom. It isn't just freedom in general terms—it may have been once upon a time—it isn't just freedom for the country to operate as it likes—it is your freedom and my freedom as individuals—the freedom of our country. I have travelled all over the state, talking to a great many groups, and I have observed that men in groups of this type are, generally speaking, the leaders in their communities. They provide the force and initiative and drive that gets things done in those communities. They lead hospital drives and Community Chests, and see that the community gets things done. But in one field they don't do very much leading, and that is in the field of government. Generally speaking, the leaders in our community, in Michigan and throughout the United States, are unwilling to lead in the field which is now almost more important than any other. They are unwilling to lead in the field of government.

I think we have a simple choice developing today. It is very clear. The more you study this picture, the clearer it becomes. It is a choice between those who believe that whatever is wrong with us, whatever does not work very well, can be solved by going to Washington for it, that it can be solved by bucking the problem on up the line to a group of Washington bureaucrats who presumably have some magic answer.

It is a struggle between that kind of thinking and those who believe that we will survive as a free nation only if we keep our free institutions,

Address delivered at the Formula for Freedom presentation before the House of Delegates, Michigan State Medical Society, Grand Rapids, Michigan, September 24, 1951.

our free professions and our free enterprise out of the hands of Federal bureaucrats.

All you have to do is to look around you to see this drive for control. You don't have to be a soothsayer or have any special insight as to what is happening. In business there is always a pressure from the Washington level to try, if they can, to put more controls on the decisions that business has to make.

Recently in the Defense Production Act there was a proposal that all business be licensed. Why? To enforce price controls. Why? Well, someone asked Michael DiSalle that question, and he said, "That is so if they don't do what I tell them, I can put them out of business." That is government of men, and not government of laws.

The same thing is true with agriculture—the whole attempt to subsidize the farm program. The same thing is true in the field of electric power. The same thing is particularly true (and I don't have to stress it because you are familiar with the fact) in the field of health. The whole Ewing plan as it is proposed is familiar to you.

The doctors throughout the states have made many, many speeches on the subject. Your Auxiliary has done a remarkable job in that regard, in educating the people as to what that particular threat is. To me that is the best illustration I know of concerning what is happening to this country and what is happening to you, and why you must not only know your Government but you must somehow or other begin to share it.

Someone said the other day, at a national meeting of a medical society, that the threat of socialized medicine had been beaten—that the program was dead. That was a very naïve statement, gentlemen. The threat of the program of socialized medicine, the threat of the Ewing plan, hangs over your heads just as heavily today as it did a year ago. Those things don't die. Sometimes they suffer a temporary defeat, but they are reborn in other forms.

There never was a time when you and the country had a bigger stake in trying to preserve a system of medical care which has produced more and better medical care for more people than any other system known in the world today, and no one ought to be carrying that fight harder than yourselves; and I know many of you are trying to do that very thing.

Certainly, if we are in our right minds, we aren't going to trade the kind of system we have for the sort of three-minute-per-patient medicine they have in England. If England wants to suffer along with it, that's all right. Certainly this country does not want that kind of program.

The answers don't lie in Washington. The answers lie in ourselves, in our local communities, in our states, in the job we can do with individuals to develop what one of our speakers has called a sense of responsibility for ourselves.

I think the answers lie probably in the kind of action some people have been trying to take through our local communities, through the states, to develop better training facilities for doctors and for nurses so that we can have an ample supply of them and so there won't be a shortage of that commodity.

The answers lie in providing better hospitals—not better hospitals built with money from Washington. If the necessary amount can't be raised in the local community and can't be provided from the state, and can't be provided by local individuals, there may be some grounds for help from above; but the job ought to be started and ought to be done, as far as we possibly are capable of doing it, in and by each local community throughout the country.

Of course, we need a lot of other things: We need better local public health programs. We need better care for the indigent. Nobody expects nor intends the people who can't provide for themselves to be allowed to die for lack of care. People are not obliged to have poor men's medicine because for some unfortunate reason they can't pay all they ought to pay. We are working forward on all those fronts of developing local health programs and facilities. Add to that the whole program of private medical health plan insurance, which now covers millions of people throughout this country. Those are the elements that make up the right way to handle this problem, as opposed to the wrong way of handling it through federal interference and through the use of federal power and federal control.

I picked up the Grand Rapids *Herald* this morning and noted a few figures in their lead editorial: 18,000, or about 88 per cent of all the doctors in Great Britain, are working for the Government. Almost all the pharmacists in Great Britain are working for the Government; 95 per ment of all the dentists in Great Britain are working for the Government.

When everybody gets on the Federal payroll, do you think we will have in this country the kind of government we have had? Not at all!! When everybody is on the Federal payroll, then everybody is dependent upon Washington and whatever the source of Federal power may be for a bonus or a hand-out.

If we can keep Federal bureaucracy out of this picture, if we can avoid the social nightmare Britain is struggling with, we can do it on our own initiative only if you men are willing to share in the problem of how to get good government—how to select good men.

Somebody said all these politicians are alike. They are not all alike. Some of them are good, honest, straight; and some of them are not. Some of them make promises they don't keep, and some of them keep the promises they make. There is a difference, and it is just an easy way of passing the problem off to say they are all alike.

We can have the kind of government you want. Generally speaking, you will get the kind of government you deserve; but you have to back the right kind of people. You have to take part in elections. You have to contribute. You have to do some work of your own. You have to feel free to talk about politics in your offices. Sure, it hasn't been done before, but this is a big stake. This is a stake in freedom for all of us!

You can call this thing that is happening anything you like—you can call it federalization, decentralization, government monopoly, socialism, dictatorship. Those names all have one common denominator, that is, central control of the lives and details of the lives of individuals. That is why government is important to you.

We are not yet in a socialized state. Our grandfathers would say we passed that point long ago. The aviators have a term: they call it "The point of no return." When you reach the "point of no return" on your outward flight, and go past it, you know that you have gone past the point at which you could have turned back and arrived safely home.

We haven't passed the point of no return in this country. If we had, there would be no point in my standing here, talking. We have not passed the point of no return. If we don't work, if we are not willing to sacrifice, if we are not willing to do something about it, the point will be reached and passed.

There is a little church out on the Maine coast, on a little island, a tiny little building built out of the timbers of ships that had been wrecked and forgotten and that had drifted up on the shore. If you go there someday, you will find an old man who will take you around. He will take you up the rocky little path that leads to it, and he will take you inside. At the end of each pew you will see a little iron hook. He will tell you about it.

He will say, "Mister, when they built this church there weren't any electric lights. When the first family came for the evening service they brought a lantern with them, and they hung it on that little hook. Say, Mister, you know, when that first lantern was hung, the place was kinda dim, but when all the families got here and all the lanterns were hung, then the church was bright with light!"

That's our program! If all of us are willing to bring our little light, however smoky, however dim it may be, and pool it together in the work of a great organization such as this, then not only your organization but the country, the state and all the world can be bright with light.

MSMS

SCIENCE WRITERS TO MEET WITH AMA

The annual meeting of the National Association of Science Writers, whose members prepare most of the medical stories for newspapers and magazines, will be held in conjunction with the AMA meeting in June. Heretofore, the science writers have been holding their annual session in conjunction with the annual meetings of the American Association for the Advancement of Science.

Since the science writers will be meeting with the AMA, the Lasker Award Committee also decided to hold its annual dinner for the writers during the AMA session. At this dinner, tentatively set for Tuesday evening, June 10, the Lasker Awards for 1951 for distinguished writing in the fields of medicine and public health will be presented. The two awards—one for a newspaper writer and one for a magazine writer—are identical and consist of $500 and a statuette of the Winged Victory of Samothrace.

The AMA will play host to the science writers at a dinner when their meeting is held in Chicago in June.

John L. Bach, director of AMA press relations, attended the writers' meeting in Philadelphia, December 28-29, 1951, at which time it was decided to switch the annual session of the AMA meeting site.—George F. Lull, M.D., Secretary, AMA.

Detroit Physiological Society

Meeting of October 18, 1951

Carbohydrate Metabolism and Energy Relationships in the Crystalline Lens

CHARLES E. FROHMAN and V. EVERETT KINSEY
Kresge Eye Institute, Detroit

It has been established that the lens contains both the flavoprotein and the cytochrome-cytochrome oxidase systems. The respiratory enzymes involved in these systems exist in much higher concentration in the epithelium of the lens than in the cortex and nucleus. The ratios of the concentrations of lactate to pyruvate in the different portions of the lens indicate that only in the epithelium does an appreciable amount of respiration take place, and that in the other portions of the lens the metabolism is chiefly anaerobic.

The amount of energy, presumably in the form of the high-energy phosphate bond, produced by the relatively inefficient anaerobic metabolism of the cortex and nucleus is insufficient to meet the requirements for the synthetic processes in these portions of the lens. It is hypothesized that the additional energy is supplied by diffusion of compounds containing the high-energy phosphate bond from the epithelium where they are formed through the more efficient respiratory process. The relative concentrations of compounds known to be involved in the transfer of high-energy phosphate (adenosine triphosphate and phosphocreatine) were shown to support the above hypothesis.

Effects of Reduced Blood Supply on Bone

CARL C. COOLBAUGH
Wayne University College of Medicine

This investigation was supported (in part) by a research grant from the National Institutes of Health, U. S. Public Health Service.

In a series of normal, adult dogs the blood supply to one femur was interrupted by using one of three different types of surgical procedures, designed to interrupt vascular supply in varying degrees of severity.

Following surgery the animals were encouraged to carry on their normal activity for varying postoperative intervals. At sacrifice both the operated and non-operated femurs were removed. Each diaphysis was divided longitudinally into four sections corresponding to the anterior, posterior, medial, and lateral quadrants. From the compacta of these sections a sample at least 3.75 cm. in length was fashioned with a milling machine. The thickness and breadth of these milled samples were made to agree within one twenty-five-hundredth of a centimeter, (1/10,000th of an inch; 250 μ) as measured by a standard micrometer, over a span of 2.5 cm. in the middle of the sample. These samples were then used for the first part of the investigation, which consisted of measuring the tensile force of the bone on the basis of stress-deformation or strain per given force in pounds per square inch. The strain or stress-deformation over a one-inch span of the sample was measured by a Porter-Lipp extensometer in units of 0.001 of an inch. This was used in conjunction with a strain-gage type dynamometer. The tensile force was applied to the specimen along its long axis by a universal-materials-testing-machine which has an accuracy rating of 0.5 per cent.

For the second part of the investigation, the comparative normal and avascular bone density determinations, a sensitive density measuring device or densitometer was used. This densitometer, which was developed by Coolbaugh, Evans, and Lebow (Science, 114:182-185, 1951), consists of a radioactive source, a bone sample holder, and a Geiger-Muller tube. It is used with a scaling and counting chamber. A beta-ray emitter was chosen for the radioactive source because nuclear physicists have shown that the percentage transmission of beta rays by any material is proportional to the logarithm of the density of that material. Strontium-90, with a half life of 25-30 years, insures a constant source of radiation. The densitometer is so designed that the geometrical relationship of the radio-active source and bone sample remains constant.

Each day a laboratory background count was taken with the radioactive source removed from

the room. Next a count was taken with radioactive source in place (densitometer cassette) without a bone sample. Next, counts were taken using four standard strips of aluminum which measure 0.02, 0.03, 0.04, and 0.05 cm. in thickness. From these readings a graph was plotted on semilogarithmic single cycle graph paper with the sample area in gms/cm.^{2} as the abscissa and the intensity in counts/min. as the ordinate. This graph was then used as the standard reference graph for determining the bone densities. The numerical count obtained with a given bone sample was referred to the graph and the corresponding area read off in gms/cm^2. This figure, divided by the thickness of the sample in centimeters, gave a direct reading of the density in gms/cm^3.

The resuults obtained showed that following interruption of the blood supply of bone there is an initial postoperative interval of from 24 to 96 hours during which the density and modulus of elasticity of the compacta decreases. By the 5th day (120 hours) this decrease in density and modulus has practically disappeared, the avascular and normal values being about equal. From the 5th or 6th day onward there appears to be a reversal of the earlier process, with an increase in density and modulus of elasticity over and above the corresponding normal bone.

Even though the interpretation of bone-density changes is usually carried out on the basis that the density of bone is primarily dependent upon its mineral content, which would obviously involve the fundamental process of bone calcification, yet it is not possible at this time to explain completely the density changes noted with decreased blood supply to bone.

Chemical analyses and *in vitro* calcification studies for the identification of a possible calcification-inhibitory substance produced in avascular bone are being carried on at the present time by the author, and it is hoped that the explanation will be forthcoming.

Hypophysial Anatomy and the Stress Reaction

JOHN D. GREEN
Wayne University, Detroit

Some of the evidence for the nervous mediation of the stress reaction was presented with special reference to the author's own work on neurohumoral control.

Meeting of November 15, 1951

Certain Endocrine Aspects of Sterility in Women

CHARLES S. STEVENSON, M.D.
Wayne University College of Medicine, Detroit

General clinical experience seems to point to mild degrees of hypothyroidism as being the most common dysfunction in sterile women. The next most common endocrine defect appears to occur in connection with corpus luteum function. This defect is chiefly manifested by evidence of inadequate progestational change in the endometrium and may be the result of faulty gonadotropin stimulation of the ovary or of faulty response of the ovary to an apparently normal gonadotropin stimulation. There may be a deficiency in estrogen production by the ovaries as well as in progesterone production. Estrogen deficiency is chiefly manifested by prolonged and irreguluar intermenstrual periods, and a quantitative decrease in menstrual flow and duration, as well as sterility.

A study of endometrial biopsy specimens, taken about two days prior to the expected onset of a mensis, has revealed that 80 per cent of the sterile women in this study appeared to be ovulating but only one-third of the group showed adequate secretory or progestational change in the endometrium. Twenty per cent of the women were not ovulating.

The treatment consists of replacement therapy, giving whole desiccated thyroid gland tablets by mouth in appropriate daily dosage and, in those patients who give evidence of only progestational phase inadequacy, 10 milligrams of "buccal" progesterone should be administered morning and night after meals starting on the 16th to 18th day of the cycle and ceasing on the 27th day of the cycle. For those women whose intermenstrual period is appreciably longer than the usual 28-30 days and in whom the endometrium may give evidence of inadequate proliferation, as well as inadequate progestational change, a course of grad-

ually increasing doses of oral estrogen is advised, starting on the 4th day of the cycle, being maintained at maximum dosage from the 20th through the 23rd day, and rapidly being decreased to the original small dose by the 26th day, with none being given on the 27th day. Conjugated equine estrogens are believed to be very satisfactory for this purpose and the usual starting dose is 0.625 milligrams daily, the maximum daily dose being roughly five times this amount. It is recommended that this cyclic therapy be given for three consecutive months.

Studies on Epidermal Regeneration

HERMANN PINKUS, M.D.
Detroit Institute of Cancer Research and Wayne University College of Medicine, Detroit

A method is presented by which a graded proliferative stimulus can be applied to human epidermis. Previous attempts at stimulating epidermal proliferation fall in two groups. Either a defect was set and the healing of the wound was studied, or natural conditions under which epidermal hypertrophy occurs were simulated. Electricity, changes in temperature, chemical irritation, friction, running in tread mills have been used for the latter purpose. Most experiments were done on animals, the epidermis of which differs in various respects from human epidermis. The methods can not be conveniently applied to human skin, or they set up complicated and uncontrollable conditions.

By applying transparent pressure-sensitive adhesive tape to the skin, Wolf† removed a single superficial layer of horn cells for microscopic study. It was found* that if this process is repeated, the entire horny layer can be stripped off step by step without undue damages to the underlying living epidermal cells. Scotch Tape® was applied to the volar surface of the forearm, patted on, and peeled off. It took from 20 to 30 strips to remove most of the horny layer. Biopsies taken at various intervals from ½ to 96 hours after stripping showed greatly increased mitotic activity starting as early as 24 hours after the stimulus. In one case 4 per cent of the living epidermal cells were found undergoing mitosis at 72 hours. It is planned to compare features of this benign and self-limited proliferation to carcinogenesis. It is expected that the strip method may be applied to various physiologic problems, such as the role of the horny layer in loss of heat and water, in absorption of chemicals, in electric resistance, sensory perception, et cetera.

†Wolf, J.: Das Oberflächenrelief der menschlichen Haut. Ztschr. f. mikr-anat. Forschung, 47:351-400, 1940.
*Pinkus, H.: Examination of the Epidermis by the Strip Method of Removing Horny Layers. J. Invest-Dermat., 16:383-386 (June) 1951.

The Arterial Blood Supply of the Human Stomach

JOHN REID BROWN and JOHN WILLIAM DERR
Detroit

The arteries of the stomach have been restudied by latex injections of fresh human autopsy specimens. Injections were carried out with all vessels intact, after which the relative importance of the left and right gastric and right and left gastroepiploic arteries was determined by injecting each after ligation of the other three. Resulting specimens, cleared, demonstrate the abundant anastomoses within the gastric wall and the relative proportions of the blood supply which are or can be contributed by each of these vessels. The results are of great interest in relation to operative procedures upon the stomach.

Meeting of December 20, 1951

Paper Chromatography as a Rapid Method for Survey of Enzymes

JOHN F. R. KUCK, JR.,
Wayne University, Detroit

A tissue extract is made by grinding with sand and an equal amount of buffer, and then centrifuging. Aliquots (2 to 3 ml) of the supernatant are put into flasks with 2 to 8 micromoles of substrate. Two controls are used: a water blank containing no substrate which serves to indicate the normal level of metabolic products; and an inactive blank made by adding 2 micromoles of substrate to an inactivated sample which serves as a semi-quantitative standard for comparison with the test samples. After incubation the samples are freed of protein and made up to 1 to 2 ml. Aliquots (.05 ml) are subjected to paper chromatography along with appropriate reference solutions. The disappearance of the substrate in the test samples as compared with the inactive

blank is an indication of its enzymic conversion. The appearance of new products, or increases in products normally present at levels shown by the water blank, is an indication of the pathway of the enzymic conversion. The method is applicable to a survey of liver tissue for the presence of enzymes acting upon cystic acid, since it and the expected metabolic products, alanine or taurine, are all ninhydrin-reactive substances.

Heat Processing and its Implications in Nutrition

M. Iacobellis, L. J. Schroeder and A. H. Smith
Wayne University College of Medicine, Detroit

This investigation was undertaken to re-evaluate possible nutritive damage to milk and milk products incurred during commercial heat processing. Samples of commercially pooled whole raw milk were frozen, while other samples from the same source were processed and converted into evaporated milk and whole milk powder by the Pet Milk Co. In addition to these commercially processed milks, raw milk from the Borden Co. was autoclaved at 10 and 15 pound pressure for 15 to 30 minutes in our laboratory.

The experimental subjects used in this investigation were four adult female dogs and nitrogen balance studies were the criteria of possible deleterious change.

It was observed that (1) under the experimental conditions employed commercial heat processing as used in the preparation of evaporated and dried whole milk does not decrease the nutritive value of the protein constituents; (2) that autoclaving whole raw milk at 10 or 15 pounds pressure for 15 or 30 minutes has no detrimental effect on milk protein; (3) that the digestibility and biological value of milk protein does not change if milk is kept in frozen storage for five months.

To explain the beneficial effect of heat on the milk protein as contrasted to the deleterious effects of the same heat conditions on other food proteins, the same experiments were carried with "Starlac" which is obtained from high quality fresh whole milk by removing 97.5 per cent of H_2O and 99 per cent of fat with the hope of finding in these two factors the clue for the difference in results. The "Starlac," therefore, was autoclaved at 15 pounds for 30 minutes dry and reconstituted with water at different concentrations. It was observed that "Starlac" autoclaved without addition of any water kept the dogs in marked negative nitrogen balance, while "Starlac" which was autoclaved in the presence of H_2O kept the dogs in positive nitrogen balance.

From these experiments, we could conclude that although the interaction of proteins and carbohydrates is known to decrease the nutritive value of proteins when subjected to heat, such an interaction does not seem to be in evidence when these two components of food are subjected to heat in aqueous medium under the present restricted conditions of concentration and of time and degree of heat processing.

Metabolism of Sulfone Drugs

A. J. Glazko, W. A. Dill, L. M. Wolf and J. Strong
Parke, Davis and Company, Detroit

The absorption, distribution and excretion of a number of diaminodiphenylsulfone (DDS) derivatives was studied in animals, with particular attention to M-52 (4-allylamino-4′-aminodiphenylsulfone). With DDS, Promin, M-52, Diasone and Sulfetrone given orally to rats, highest concentrations of drug were observed in the liver and kidneys, with lower concentrations in the spleen, lungs, muscle and heart. In all cases lowest concentrations were found in brain tissue. DDS appears to be absorbed and excreted more readily than any of the substituted sulfones tested. Clinical subjects on continued daily dosage of M-52 maintain fairly constant blood levels over a 24-hour period. Excretion of M-52 is slow, with about one-third of a given dose excreted in the urine and two-thirds in the feces over a period of several days.

Two dimensional paper chromatograms of rat urine after the administration of DDS derivatives revealed the presence of some unchanged drug, considerable free DDS produced by hydrolysis of the substituted derivatives *in vivo,* and several unidentified metabolites. One of these appears to be a glucuronic acid conjugate of DDS which is unstable in acid solution, breaking down to form DDS. Chromatography of blood serum from patients on M-52 indicates that some free DDS is present, as well as unchanged drug. It is suggested that the slow excretion of DDS derivatives, coupled with slow hydrolysis in the body to form DDS, offers a valuable means of maintaining blood levels of DDS over long periods of time with a minimum of side reactions.

President's Page

Doctor William Beaumont

Beaumont Memorial Restoration Begins

To the medical profession of Michigan has been given the privilege of restoring the old American Fur Company Store on Mackinac Island. By now, all doctors of medicine in Michigan should be acquainted to some degree with the historical importance of this old store, where William Beaumont first saw his famous patient, Alexis St. Martin. It is hoped that all members of the Michigan State Medical Society will avail themselves of the opportunity to contribute something to this memorial. In doing so, all will feel a noble pride in having a part in developing a medical shrine which will stand for all time to come.

Otto O. Becke

President, Michigan State Medical Society

Editorial

POLITICS UNADULTERATED

ABOUT SIX or eight months ago, President Truman made an announcement that if the medical profession would produce a national health program as good or nearly as good as his he would get behind it and try to make it work. He completely ignored the fact that the medical profession and the hospital group had the Blue Shield and Blue Cross plans in operation, doing a very satisfactory service for all who wish them. Approximately half of the total population of the United States now participate in these plans, in spite of the nearly twenty-five millions of people who are under the various government health services.

Since this promise, and as an additional spur to socialization, the American Fabian enthusiasts, the counterpart of those responsible for the socialism of Britain, are still very active. One of the latest plans proposed by our Government, Oscar Ewing's old age hospitalization program, promising complete hospital care for those over sixty-five, would accomplish the socialization of another fairly large segment of the population. Those over sixty-five are a rapidly increasing percentage, and their inclusion in the Government-sponsored category, Oscar claims, can be done without a dollar's extra cost, because it has suddenly been determined that the Social Security funds *are adequate to cover all these new costs.* Oscar fails to report that the Social Security funds have not been allowed to accumulate, but have been used by Government for ordinary going expenses, and whenever an account is paid by the Federal Security Agency the sum must be raised by a new tax contribution. When this suggestion was made a few months ago, it was not completely accepted, but has recently cropped up in one of Mr. Truman's utterances, with the explanation that there would be no extra cost.

Not long ago, Governor Warren of California announced himself as a candidate for President on the Republican ticket. He also has repeated his suggestion of socialization of medicine as one of his ambitions. He does not have the confidence of the Doctors of Medicine in his own State, but he is accepted as one of the men who must be reckoned with in the forthcoming election. He has tried his scheme in California without success, but he is unconvinced.

Another effort toward the same objective has just been announced. The President, on December 29, 1951, announced the appointment of a Commission on the Nation's Health Needs. The objectives are not too clearly stated. The Chairman is Dr. Paul Magnusson, orthopedist of Chicago, formerly head of the Veterans Bureau.

Another Emergency

Giving the health professions scant consideration, the President in effect has declared a National Health Emergency, and has appointed a lay commission of men to study the health needs of the nation, including his own national compulsory plan, as a defense measure, and to report a program within a year or earlier if possible.

As appointed, this was a commission of fifteen, containing a few doctors of medicine who are in independent practice (one of whom, Gunnar Gundersen of the AMA Trustees, promptly refused to act), with sufficient bureaucrats and socially minded individuals to assure a complete smothering of the conservative, workable, but independent American ideologies.

The President directed the commission to enquire into and study the following:

1. Present and prospective supply of physicians, dentists, nurses and other medical people and the ability of schools to provide what is needed.
2. The ability of local public health units to meet the demands of civil defense requirements.
3. Problems created by the shift of workers to defense-production areas which would require relocation of medical personnel.
4. How existing and planned medical facilities meet present and prospective needs.
5. Present research activities in the field of health and the research program needed.
6. The effect on maintaining health standards of actions taken to meet long-range military, civil-defense and veterans requirements.
7. The adequacy of private and public pro-

grams designed to provide ways to pay for medical care.

8. How much the Government should contribute to local governments for health purposes.

The President's attempt, by the appointment of another commission, to take the issue of health out of the 1952 political arena has been unmasked and shaken by the Cline-Gundersen statements.

Not Interested

It is not clear to us whether the President is proposing this new commission as a part of the administrative reorganization authority allowed him by the legislation following the Hoover Commission report. He, however, has announced it as an Emergency Defense Program, and might attempt to assume the authority of creating his national compulsory health plan on this basis. We can do no better in presenting the attitude of the medical profession than to repeat the announcement published quite generally in the public press Wednesday, January 2, 1952:

American Medical Association Head Rips Truman Health Plan as "Brazen"

President Truman's newly appointed commission on the nation's health needs received a second blast of criticism yesterday when Dr. John W. Cline, president of the American Medical Association, described the commission as "another flagrant proposal to play politics with the medical welfare of the American people."

Earlier Dr. Gunnar Gundersen of La Crosse, Wisconsin, a trustee of the association, refused to serve as a member of the commission. He charged the Presidential body was packed with advocates of Truman's socialistic compulsory health insurance plan and was timed and inspired politically.

Shocking Proposal, Cline Says

In a statement he issued, Dr. Cline charged that the commission "to be financed from emergency funds allocated for national defense is a shocking attempt to give White House sanction to the brazen misuse of defense emergency funds for a program of political propaganda, designed to influence legislation and the outcome of the 1952 election."

"There is no health emergency in this country to require such an investigation," Dr. Cline continued, "or to justify the use of defense emergency funds by such a commission. The health of the American people never has been better, as all competent authorities know, and greater progress is being made in providing medical care for all who need or desire it than any other time in the nation's history.

"In the face of such circumstances, any attempt to whip up an asserted health 'emergency' as an excuse to create another tax supported commission is an outrageous abuse of public authority.

"President Is Confused"

"It is clearly apparent from President Truman's statement, in which he has the bad grace to insist the people are 'confused,' that he still refuses to accept public rejection of his socialized medicine program and hopes to use this new commission to propagandize for it.

"It is the President who is confused, not the people. Congress, when it reconvenes, should put a quick end to this misuse of national defense funds for a useless commission, and for highly questionable political purposes.

"Dr. Gundersen's refusal to serve came in the form of a telegram to Dr. Paul W. B. Magnuson, Chicago orthopedic surgeon. Gundersen said his name had been released without his approval and before he had seen an official statement of the commission's objectives."

CIVIL DEFENSE

WAYNE COUNTY Medical Society has arisen to the necessity for constructive action in preparing for the Atomic or other disaster which any major American city must anticipate. Their Civil Defense and Disaster Committee headed by Max L. Lichter, M.D., held meetings extending over two days of the serious storm conditions, and produced a direct program. In this issue of THE JOURNAL, we are happy to present the chairman's report.

The March number of THE JOURNAL, which last year was devoted to the Atomic Energy problem, and which this year is designated to carry on with treatment, use in medicine, avoidance of injuries, et cetera, will publish many of the papers prepared by Dr. Lichter's committee. We hope that throughout the year we may be privileged to present new evidence, results of study, reports or complete papers bearing on this very real problem with which medicine must prepare to cope.

We congratulate Dr. Lichter and his committee and thank them for a project well executed.

MORE MICHIGAN FIRSTS

WE HAVE BEEN talking of Michigan Firsts in the field of economic and administrative medicine, for several years, but there are undoubtedly many firsts in the field of scientific medicine, which contain a story both instructive and interesting. Also, if some of these stories are not told, they will be forever forgotten.

On another page, the editor has told one such

story, of the first use of a drug of the epinephrine type Adrenalin®, the only one known then) in the treatment of asthma. We have two or three other similar stories, and have been promised one or two more. If any of our members know of such a story, we beg you to submit it. The story will be published, and we know will not only add to our collective knowledge but will confirm in our minds the fact that, in Michigan, medicine has always been a progressive profession.

May we have your story of a Michigan First?

"STAND YE IN THE WAYS"

WHAT SHALL it profit a physician to gain his professional freedom from socialistic planners, if he lose his professional soul to hospital corporations? And to what avail do we unite to study and make recommendations to insure the best medical practice in hospitals and under medical insurance plans, if our recommendations and requirements are ignored or circumvented by our colleagues and hospitals authorities? And are there those amongst us who will help to save our black sheep who have wandered amid the thistles and thorns of compromise? And what is this all about, anyway?

Doctor, we are talking about Michigan Medical Service, other insurance plans, many Michigan hospital administrations, the AMA and College of Surgeons recommendations, and many of our brethren in radiology and pathology. The bald facts follow: When Michigan Medical Service was organized, the principle was laid down and accepted that MMS would make payments only to physicians. This was done in support of the principles evolved and enunciated by medical organizations and to assure sound and continued physician interest and participation in the plan. This was and is good, and Michigan can take pride in the fact that this action has been cited nationally as an example of Blue Shield Plan administration at its best.

Unfortunately, however, this principle did not fit in with the preconceptions and prejudices of many Michigan hospital administrations and a small minority of physicians. In most Michigan hospitals, the above principle has been circumvented in the case of radiologists and pathologists by the execution of assignments of Blue Shield fees to the hospital by the physician concerned. These men have transferred their just claims upon MMS fees over to their hospitals.

The fact that Michigan physicians, in establishing MMS, wished it to be otherwise and that the AMA and American College of Surgeons recommended otherwise has not counted. Assignments have been executed, in fact, in face of the American College of Surgeons inspired requirement present in most hospital staff pledges that a physician shall not permit others to collect fees for him. In some cases, the assignments were made by a predecessor but enforced by pressure upon the present radiologist or pathologist when he became a staff member.

In some of the hospitals, certain of these specialists have made such assignments simply because "they couldn't be bothered" to collect the fees themselves. Now, we will admit that it is at least questionable whether members of the profession in Michigan have a legitimate concern in what a colleague does with his fees after he collects them. We do have a valid and potent interest in Michigan Medical Service however, and any other Blue Shield Plan which may use MMS as a model, and this claim allows us very definitely to insist that our few other worldly brethren come down to earth long enough to receive the MMS fees due them. The principle of payments only to physicians was established for the protection of the public and the profession at large. To stand by and permit it to be breeched by hospital pressure or professional ennui is unthinkable.

Where do we go from here? Back to our hospitals and radiologic and pathologic colleagues to find out whether a portion of a free physician's birthright has been signed away. If so, let us change it.

"Stand ye in the ways, and see, and ask for the old paths, where is the good way, and walk therein."—Jeremiah VI, 16.

S. W. DONALDSON, M.D.

MSMS

GIANT HAZEL NUTS

Filberts, more commonly known as hazel nuts in the East, have been placed on sale in New York which are twice as large as the ordinary ones. They are grown in Oregon. That state and Washington are declared to be the only region in the world outside of the Mediterranean countries where this nut can be raised profitably on a commercial basis.

Michigan M.D.'s Restore Beaumont Memorial

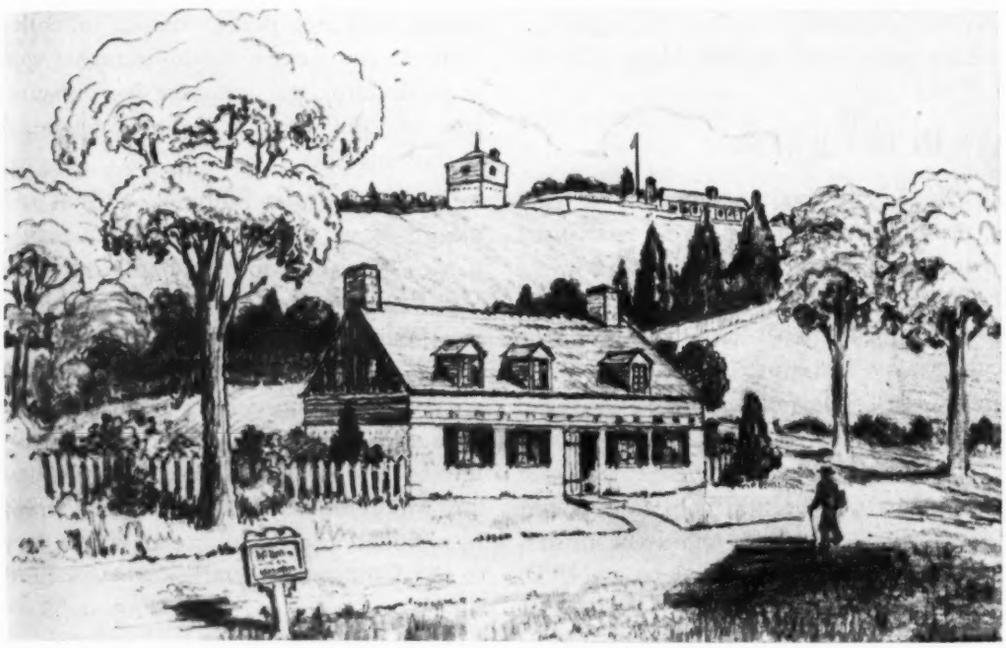
The ugly rumble of a musket crescendoed through the boisterous voices of trappers and traders crowded into the American Fur Company's store on Mackinac Island. As the sound echoed against the stone walls of the building, a startled young French-Canadian voyageur grasped his left side and crumpled to the hob-nail scarred floor. The voyageur's name was Alexis St. Martin.

Dr. William Beaumont, the medical officer of Fort Mackinac, was hastily summoned by a motley group of fur trappers. The doctor did what he could to repair the gaping wound in St. Martin's side even though he was certain the young voyageur could not live through the day.

But it was a day of destiny—June 19, 1822—a day for the world to remember.

For Doctor Beaumont and St. Martin had been brought together. And St. Martin lived with a hole in his side! St. Martin lived with a gastric fistula through which Doctor Beaumont could study the action of the stomach's digestive process.

The story of Doctor Beaumont's research is an epic of medicine. His experiments on the gastric juices are monumental in the history of medicine. With painstaking care Doctor Beaumont recorded fifty-one inferences uncovered in his experiments. While his laboratory equipment was crude, his observations and interpretations were keen and



PROPOSED BEAUMONT MEMORIAL BUILDING

From the vision of artist and architect, backed by exhaustive, documented research, the building portrayed in the artist's sketch can be turned into stone and mortar. It is proposed that a replica of the American Fur Company store stand once again on the spot marking the historical beginning of Doctor Beaumont's famed contribution to medical science. Inside this store a museum will preserve the memory of that period in the early 19th Century which became so important to modern medicine. This living memorial, this shrine of stone and wood can rise from the decay of time to proclaim to all the never-ending quest for scientific truth. And the Medical Profession of Michigan, through its generous contribution in the year 1952, can make tangible, for all to see forever, the labors of Beaumont and all other Doctors of Medicine who have brought Health and Long Life to the people of these United States.

clear—mileposts in experimental medicine. These observations were passed on to other men of science—doctors of medicine—so that more of them might know more about the mysteries of the human body.

The conclusions made by Doctor Beaumont are rated alongside Harvey's discovery of the circulation of blood. His observation of the gastric juices is one of the foremost medical achievements in a profession consecrated to the eternal hope that more may know.

Resolution

WHEREAS, Dr. William Beaumont began his pioneering work in physiology at Mackinac Island, Michigan, in 1822, and

WHEREAS, the first observation of his famous patient, Alexis St. Martin, was made by Dr. Beaumont in the American Fur Company's trading post, now known as the Early House on Mackinac Island, and

WHEREAS, through the generosity of Parke, Davis & Company, Detroit, the Early House was acquired several years ago by the Mackinac Island State Park Commission as the first step in plans to convert this historic building into a permanent shrine to the memory of Beaumont, with maintenance to be assumed by the Park Commission, and

WHEREAS, such a monument to the imperishable research of Beaumont would constantly remind the thousands of people who visit Mackinac Island annually that a free medicine is always a progressive one, eternally endeavoring to improve its science and its service to the public; therefore, be it

RESOLVED: That the Michigan State Medical Society assume responsibility for developing the Beaumont Memorial on Mackinac Island, and that the House of Delegates authorize The Council and the Woman's Auxiliary to the Michigan State Medical Society to inaugurate a drive for funds among the Michigan State Medical Society members and its friends, to complete the work of transforming the Early House into a medical landmark for posterity; the collected funds to be deposited with the Treasurer of the Michigan State Medical Society; and be it further.

RESOLVED: That contributions in this campaign be on a voluntary basis with the names of all donors inscribed permanently in the Beaumont Memorial, and that the work be completed, if at all possible, in 1952 in order to commemorate the 130th anniversary of Beaumont's important discovery.

This Resolution was adopted by the Michigan State Medical Society House of Delegates at its Annual Session of September 24-25, 1951, in Grand Rapids.

The old, decaying American Fur Company Store, Mackinac Island

On this site at Mackinac Island, the blast of a musket saved a million lives.

Here is the location of the American Fur Company store where Alexis St. Martin received the wound which gave Dr. William Beaumont the opportunity to observe and record the gastric juices in operation. Since 1822, the outline of the building has changed from a fur company store . . . to a house . . . to a nonentity. Even the contour of the land is different. It is unrecognized by the thousands who pass it by without a glance.

Yet it could become a landmark of the medical profession.

It could be a spot to which the people of Michigan would point with pride . . . pride in the achievements of their Doctors of Medicine!

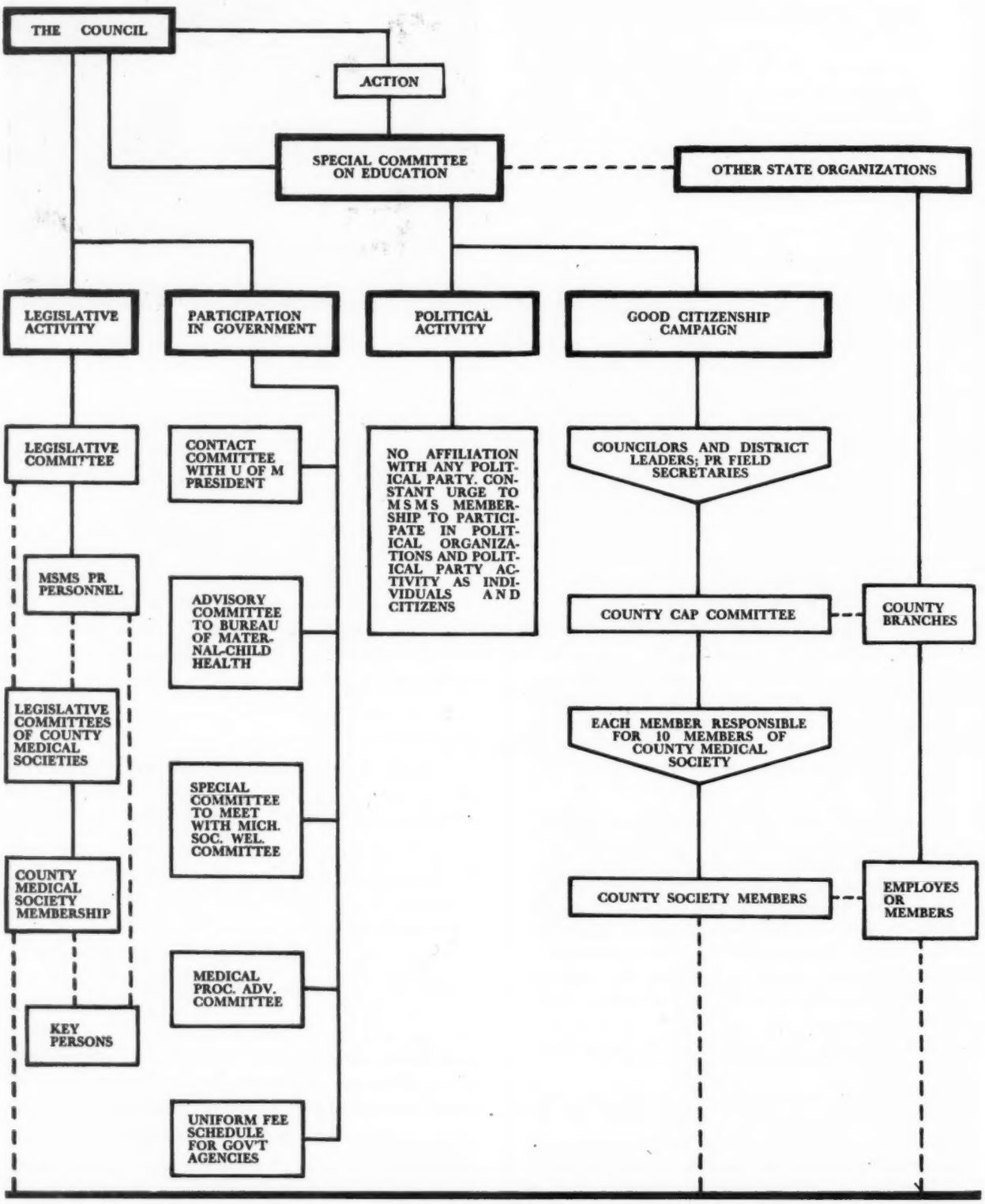
It will also serve as a reminder to all who visit the location on Mackinac Island that the medical profession is striving constantly to advance the science of medicine.

Today these advances in research begin in a completely equipped, modern laboratory. It was not so in the days of Doctor Beaumont. A kitchen was his laboratory and his tools were crude—a magnifying glass, a pair of scales, a gum-elastic tube. For an incubator Doctor Beaumont used either his armpit or a pan of warm water.

But despite these handicaps, Beaumont accomplished a great feat of research and brought more honor to his profession and fame to medicine in this state and throughout the universe.

Every Michigan Doctor of Medicine is invited to share in this shrine of honor, by individual subscription to the Beaumont Memorial Restoration.

Know Your Government



FORMULA FOR FREEDOM

A Formula that Works for All

(*Part III*)

Know Your Government

The Know Your Government element of the Formula For Freedom requires four basic types of study and activity on the part of organizations and persons. These are:

1. A constant scrutinizing of the local, state and national legislative and administrative bodies and the exercise of influence on the laws or regulations to be established by these bodies so that the decisions made by them will be in consonance with the American ideals of freedom.
2. Participation in governmental projects to the end that these projects will return to the people maximum value for tax money invested and also so that the project cannot be deviated from its original purpose by subversive influences.
3. Political activity toward the end that policies and candidates of political parties are assisted or defeated depending upon their possibilities for contributing to progress within the American concept of freedom and private enterprise.
4. Good Citiznship work toward the end that a maximum vote is gained and a maximum interest be maintained by the public in maintaining good government.

These are essentials in a republic if it is to survive and serve the people without the placing of controls which restrict freedom of self government.

The medical profession is discharging its obligations under this element of the Formula For Freedom as indicated below. The greatest difficulty involved is the maintenance of both a sustained interest and a constant desire to improve upon our program.

1. *Legislative Activity.*—The Legislative Committee of the MSMS maintains a constant liaison with the state and national legislatures and with state and national officials. This is done both directly through personal contact and through secondary contact via MSMS employes and the American Medical Association. Bulletins from both national and state societies constantly inform the county medical societies, the county medical society legislative committees and the individual members. Of equal importance is the return flow of information and assistance starting with the individual member. This work continues under the Formula For Freedom plan with particular attention to medical and health matters but not to the exclusion of matters of general civic moment. By such means doctors of medicine know their government and can be a definite force in helping others to be equally knowledgeable.

(Turn to next page)

2. *Participation in Government.*—Scores of contacts with federal and state governmental agencies are made each year by the MSMS. The society's representatives attend Michigan Day in Washington, D. C. A joint committee with the Michigan State Board of Registration in Medicine studies mutual problems, the Michigan Health Commissioner attends meetings of The Council, three MSMS Advisory Committees aid the Michigan Department of Public Instruction. A liaison committee works with the University of Michigan President and close working relationships have been developed with Wayne University. Advisory committees work with the Michigan Social Welfare Commission and the Michigan Crippled Children Commission. Services are offered and rendered to the Governor, the Michigan Civil Service Commission, the Selective Service System. Close observation is given opinions of the Attorney General, the White House Conference on Children and Youth, the "Little Hoover Commission" reports and various federal agency programs such as the EMIC. County and District Medical Societies are carrying out similar liaison and advisory services in county and local government.

This constant participation in governmental activities continues to increase under the Formula For Freedom plan as the necessity grows for guidance of government by professional organizations which are private enterprise minded. Many errors have already been avoided which would have constricted the freedom of the people as well as the medical profession.

3. *Political Activity.*—Although no affiliations by the MSMS or any other medical society is made with any political party the Formula For Freedom plan strongly recommends to the MSMS membership that it participate in political organizations and political party activity as individuals and as citizens, the effect of enlightened, civic minded and learned individuals actively participating in political work can be of great value, for political participation is a bedrock essential for the maintenance of freedom in a republic.

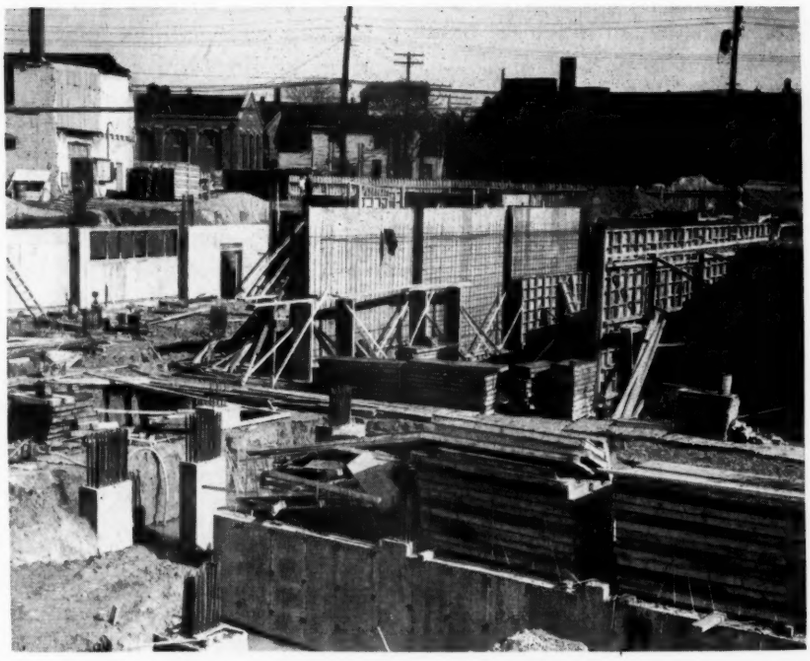
4. *Good Citizenship.*—The MSMS organized the "Co-operation with the American People" program for the purpose of carrying on a campaign to actively promote the policies and positive projects of freedom in America and gain a maximum vote by the people in general and primary elections. This program has two general directions: the first is organization within the profession to obtain maximum effort by every member, and through every member to the general public. The second is a joint effort with other ancillary medical organizations and other professional organizations; with business interests having special and financial interests in the health field and with organizations with like philosophies re private enterprise. The use of all types of communication media as well as personal and organizational contact is used in this program.

The Formula For Freedom plan continues this CAP program as a basic essential in the Know Your Government element.

Both the administration of the CAP program and the urge to political action are carried out by the Special Committee on Education. The work of the Legislative Committee is integrated by the membership of the Legislative Committee chairman on the Special Committee on Education. The Liaison activities are carried out directly by the separate committees and the MSMS Executive office. The entire effort, of course, is under the direct supervision of The Council.

The entire Formula For Freedom plan is being offered in its basic outline to other organizations who, if they accept the principle, will of necessity carry out the program in conformance with their own organizational structure. However, the Formula For Freedom is only a formula and unless its elements are combined and activated it has no force toward Freedom. That is the challenge of and to the medical profession today.

Wayne University Medical School



In October, 1951, foundations for the Wayne University College of Medicine Medical Science building were being poured.

Wayne University has been awarded $200,000 in grants for the expansion of its computing machine laboratory.

General Motors Corporation contributed $150,000 for a digital computer, first machine of its kind in the Midwest.

It will be built by the Burroughs Adding Machine Company which will contribute $100,000 worth of services.

A $50,000 grant from the Ford Motor Company will be used for the laboratory's operating expenses.

The new "mechanical brain" will enable Wayne to offer a complete instructional program in large-scale machine computation.

It will solve problems of vibration, noise and structural strength in automobiles at a great saving in manpower and expense.

The University asked the Legislature, at the January session, for $2,550,000 to complete the Medical Science Building.

The foundation and part of the first floor of the structure have been built with the $1,000,000 granted by the last Legislature.

The eight-story building is rising in a lot bounded by Mullett, Clinton, Hastings and Rivard. So far, the builders haven't been plagued by the steel and other material shortages.

It is expected to be completed in time for registration in September, 1953.

The new facilities will help ease the shortage of doctors. The Medical School will be able to teach 400 students a year, instead of the current 256.

No additional enrollments will be accepted until the building is completed, however, university officials said.

The Legislature has set a limit of $3,550,000 on the amount it will contribute toward the Medical Science Building.

Inflation has boosted the original cost estimates to approximately $4,000,000. It is expected that the difference of about $450,000 will come from local funds.

The old Medical Science Building at Gratiot and St. Antoine will be retained for its laboratory facilities.

Leo H. Bartemeier, M.D., Detroit

President, American Psychiatric Association

With an A.B. degree at the age of nineteen, Bart had no idea what he wanted to do with it, so he continued to study. He was well on his way toward his Ph.D., working in experimental animal psychology, when he decided to go into medicine. So he left the laboratories and entered Georgetown University Medical School.

He worked his way through medical school by managing the fraternity house, clerking at night in a hotel, typing notes and lectures for his fellow students, working in the laboratory at Garfield Hospital. In his junior and senior years he lived and worked in Children's Hospital, Washington, D. C.

While at Children's Hospital he met Dr. J. C. Montgomery, who was about to leave Washington for Detroit and work in the Henry Ford Hospital. He urged Bart to take the examinations and try for a position as an intern at Ford's. He did so and began his career in the Motor City.

Bart thought he would specialize in pediatrics. He changed his mind, or maybe it should be said "postponed" his work with children until many years later. After serving as resident in the Henry Ford Hospital, he worked as assistant to the Physician in Chief, and it was Dr. Frank Sladen's interest in the psychiatric aspects of various medical problems which influenced Bart to seek further training. So he went to Hopkins where for two years he worked in Diseases of the Mind and of the Nervous System under Dr. Adolf Meyer at the Phipps Psychiatric Clinic. He returned to Detroit where he has remained.

A testimonial dinner in honor of Leo H. Bartemeier, M.D., President of the American Psychiatric Association, will be held at the Sheraton-Cadillac Hotel, Detroit, on Wednesday, March 12, at 7:00 p.m.

Bart is conscientious and honest with himself and in dealing with others. He has an unusual amount of energy, determination to excel, and endless patience in his work. Many days he will spend fourteen hours in his office—and then work until one or two o'clock in the morning on correspondence, committee reports, agendas or lectures. He loves to teach. He has written and published many scientific papers. He was Secretary of the American Psychoanalytic Association and for four years was Secretary of the American Psychiatric Association. He studies continually. When at home, he gets up every day at 5:00 a.m. and sees his first patient at 6:15 a.m. On Sunday he has a "long" sleep until 6:00 a.m. Even on that day he works.

Bart has an amazing memory, even to remembering birthdays and anniversaries. To prove this paragon is human, he generally leaves his Christmas shopping until December 24!

Maybe Bart's early desire to work with children urged him to lend his assistance in the establishment of the Cornelian Corner, a young organization which is helping this generation of mothers and fathers to have a better understanding of the needs of their new offspring.

Besides the work of the Cornelian Corner, Bart has been for some time Chairman of the Macy Foundation Conference on the problems of infancy and childhood. He spent the summer of 1950 in Ireland advising the Irish Government about the possibility of establishing psychiatric services for children. Each year he finds new opportunities for study and work in this field of Mental Health.

When Bart talks about his hobbies, one realizes

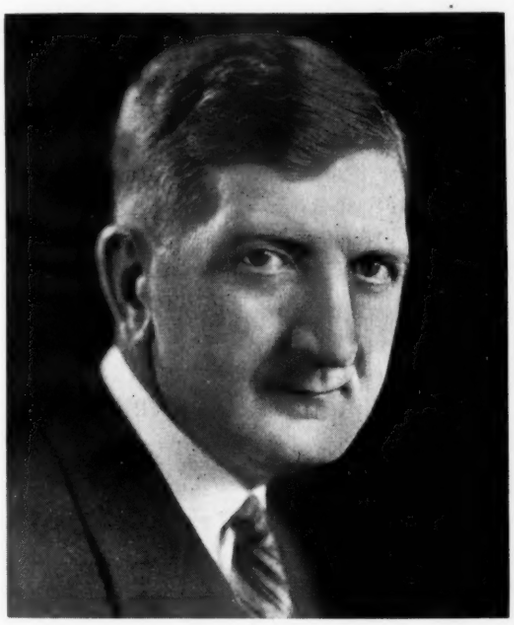
(Continued on Page 262)

James Milton Robb, M.D., Detroit

President, American Academy of Ophthalmology and Otolaryngology

"Bob" . . . "Bobbie" . . . "Jim" . . . "Milt" . . . Take your choice. His multitude of friends do.

Doctor Robb came from the land, born in 1884 in the Owen Sound area, Ontario. At eight years of age, he informed his family that he was "going to be a doctor and a good one." Whether his decision was based on inherent urge, or the seeming hardships of farming, remained to be seen. There were no tractors then, and threshing machines blew bearded chaff up one's pants legs and through his shirt at a rapid rate. Strange incidents sometimes shape vocational choice. Health tragedies in the family are not among the least of these in formative years, and a boy of eight can be so impressed as to decide: "I am going to be a doctor and a good one," and all that the declaration implied has come to pass.



At nineteen he came to Detroit to study medicine, but found he was too young to be enrolled, so he took a job at the Acme White Lead and Color Works as bookkeeper. His characteristic "prone to action" made it difficult to keep him from mixing paint instead of keeping the books. He is still that way—doesn't want even to look at the ledger. He demonstrates that in medicine to give service to the people and lots of it happily and efficiently makes the doctor's social security adequate.

A year of mixing figures and paint, and he entered the Detroit College of Medicine (Wayne University), graduating as valedictorian in 1908. A colleague in later years, while watching him perform a radical mastoid operation and not knowing "Milt's" scholarship, remarked: "How strange that the valedictorian of a graduating class in medicine never amounts to much as a doctor." Doctor Robb let the man be happy in his thought and kept on operating. He continues the studious habits of his college days. College work was intermixed with riding the ambulance for the old Red Cross Hospital and externship at Harper Hospital where he later interned.

Among the influences that shape a medical graduate into a good doctor, Doctor Robb admits the power of dynamic personality of his preceptors: Theodore McGraw, Henry Carstens, Sr., Angus McLean, Don M. Campbell, Eugene Smith, E. L. Shurly, Daniel Laferte, Preston Hickey, E. A. Chapoton, Neil Hoskins. These and others turned the tide. After two years of assistantship with Doctor Campbell, the young surgeon's quest carried him through studies at the University of Vienna, then two years in practice, and then away again, this time to London to the Golden Square Ear, Nose, and Throat Hospital, and to Moorfields, where the first World War overtook him.

In 1922, he qualified by examination to practice in Saskatchewan, for a license to practice somewhere in the British Empire was essential to his next hoped-for step in further surgical preparation. He then proceeded to Edinburgh, where after months of study and grilling he qualified for the degree of Fellow of the Royal College of Surgeons in 1922. He is a Fellow of the American College of Surgeons, and a member of all of the local and national otolaryngological societies. And now, he is President of the American Academy of Ophthalmology and Otolaryngology, one of the best organized of postgraduate teaching institutions.

Preparation for excellence in surgery came first.

A dinner honoring the President of the American Academy of Opthalmology and Otolaryngology, J. M. Robb, M.D., will be held at the Detroit Athletic Club, Thursday, March 13, 1952, at 6:30 p.m.

On being asked one day for some criteria evidencing possible surgical skill in a doctor of medicine, he mentioned two characteristics:

"First, the good surgeon on examining a possible surgical case will hope that an operation may not be necessary, but if it is necessary, that he might be the one to have the great privilege of doing the operation. And second, *work*. Other things being equal, good surgery develops through much experience and this requires seeing many patients."

As an assistant of Doctor Robb for several years, I was expected to meet him at the hospital not later than 7:15 in the morning. After surgery was over, we proceeded to the office, going through the day heavily except for lunch, leaving the office at 7:00 p.m. for dinner at the D.A.C. (before he was married), and then making house or hospital calls often into the night. There were no half days off until Sunday at 1:00 p.m. The week started over again at the hospital at 7:15, Monday morning. Why such a schedule? "Except one sees many people at their convenience, one will not have enough surgery to be good at it." Just that, and it was final.

And then after twenty years in the midst of heavy practice, to exemplify the essentials and the importance of organized effort within medicine, and to the end of the public needs in his home community and state, he became President of the Wayne County Medical Society, and later of the Michigan State Medical Society. During these terms many significant developments were initiated which space here does not allow to be catalogued.

He thought, in those years of preparation and the development of a large practice, that he was pretty skeptical of women . . . "all women," but one day he met the lovely Virginia Yerger, daughter of the Prosecutor of Shelby County, Memphis, Tennessee, and he was not so "tough" after that. His influence and the satisfactions of his life have doubled. James, Elisabeth, David, and Virginia are the children.

As Professor and Head of the Department of Otolaryngology at the College of Medicine of Wayne University, and Chief of the Division at Receiving and at Harper Hospitals, he has proved his influence as a teacher. His characteristic of forever being early instead of late finds him on hand daily at 7:00 a.m. at Harper where he joins the interns and residents at breakfast. By these men in informal conference, he is welcomed as "The Chief of the Dawn Patrol." He exemplifies purpose, and among his essential purposes is the training of young men to distribute good medical care. From morning until night, he demonstrates that "there is a job to be done," and that it must be done well. In this, he may well be characterized as "selfless." He has a consciousness of "what is vital," and the concept is contagious without its being obvious, for his depth of humor puts his message across unknown to the recipient until said recipient awakens to the fact later. Here is a personality that is never negative.

It is difficult to sum up the subject of this sketch in this short space, but the word that does it best perhaps is that here is a man of stature. While they call him "Bob" . . . "Bobbie" . . . "Jim" . . . and "Milt" . . . the profession and the public appreciate this friendly man as "Doctor Robb," Master of the situation. He portrays no pious mien but he lives the concept that "He who would be the master must be the servant." Dr. Duncan Campbell said of him yesterday, "He is a good man to go down the river with."

"Doctor Robb," we salute you.

R. H. P.

THE TAXPAYER PAYS

The average American will give the Government twenty-nine weeks' more pay out of his working life as a result of the higher Federal taxes which took effect November 1.

The Commerce Clearing House, a business and tax law analyzing agency, made that estimate. It defined its average American as twenty-nine years old, married and the father of two, earning $4,300 a year.

Under the old tax structure, the organization said, he could expect to pay $34,743 in taxes during his working years. Under the new rates he can add at least $2,420 for a total of $37,163 during his working life.

This "average man" will have $67.22 less spendable income a year as a result of the new taxes, the organization said.

If he works until he is sixty-five, it added, he will pay in taxes a sum equal to his entire earnings for more than eight and a half years.

These tax figures include excise, real estate, state and local taxes as well as income taxes.

now in parenteral form...

BANTHĪNE®

Bromide

Brand of Methantheline Bromide

for use when oral administration is difficult or impractical —when more prompt action is desired

Banthine—a true anticholinergic drug with an adequate range of safety—is now made available to the medical profession in parenteral form, for use intravenously or intramuscularly in those conditions characterized by nausea and vomiting, when oral medication cannot be retained and when a prompt action is desirable.

Through its anticholinergic effects, Banthine inhibits excess vagal stimulation and controls hypermotility.

In Peptic Ulcer—the value of the oral form of Banthine is now well established. However, edema in the ulcer area may indicate parenteral Banthine until the healing processes have reduced the edema.

In Pancreatitis—it has been found that parenteral Banthine relieves pain, effects a fall in blood amylase and produces a general improvement in the patient's condition.

In Visceral Spasm—it inhibits motility of the gastrointestinal and urinary tracts.

Parenteral BANTHĪNE is supplied in serum-type ampuls containing 50 mg. of Banthine powder. Adult dosage is generally the same as with Banthine tablets.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

Provisional reports for the first ten months show that in 1951 Michigan had the highest birth rate and the lowest death rate in its history.

Approximately 170,000 babies were born in Michigan in 1951, an all-time high. Less than nine persons per thousand died during the year, shaving a fraction off the previous low death rates of nine per thousand in 1949 and 1950.

* * *

To help meet the mounting demands for blood and blood products, the Laboratories of the Department have put into operation a new mobile unit, making two mobile blood collecting units the Department has in the field. The new unit was financed by contract with the American National Red Cross.

Blood is collected in Michigan by the Department's procurement units, American National Red Cross Regional Centers, Michigan military establishments, prison hospitals and by hospital blood banks in Michigan. This blood is procured for four purposes: (1) whole blood for the armed forces in Korea, (2) plasma and derivatives for the armed forces and for national defense, (3) plasma for civilian use, and (4) whole blood for civilian use.

Forty-seven local hospital blood banks now send their outdated blood to the Department's laboratories to be processed into plasma, immune serum globulin and normal serum albumin. These products are then returned to the various hospitals.

* * *

The Division of Laboratories performed a record 1,146,296 diagnostic tests during the past year to assist physicians in identifying disease, and produced and distributed 3,315,354 doses of serums and vaccines for the prevention, diagnosis or treatment of illness in Michigan people.

* * *

Vital records of the Department show that 701 persons in the State committed suicide in 1950. Of these 78 per cent were males.

The most common means of suicide among males was firearms, accounting for 47 per cent of the male suicides. Among the women, poisoning was the most common method, accounting for 34 per cent of female suicides. The second choice for both men and women was by hanging or strangulation, which accounted for 28 per cent of the female and 22 per cent of the male suicides.

* * *

The Department is urging vaccination of dogs against rabies at this time. In Michigan, there is usually an increase in rabies among animals during January and February, reaching a peak in late winter and early spring.

* * *

Fluoridation of public water supplies as an effective measure of preventing tooth decay in children was endorsed by the State Advisory Council of Health at a recent meeting. The Council urged the Michigan Department of Health to take all possible steps to promote its adoption in municipalities throughout the state. A total of nineteen Michigan communities are now adding fluorides to their water supplies, and 11 others have plans approved, awaiting installation of equipment or delivery of chemicals.

* * *

Two of the Department's most popular pamphlets have been revised by the Section of Nutrition. "What to Eat Before and After the Baby Comes" has been brought up to date in the light of the latest research on nutrition in pregnancy. Physicians and nurses have found this publication a useful aid when working with expectant mothers, either individually or in mothercraft classes. The new material was approved by the Committee on Maternal Health of the Michigan State Medical Society.

"As Your Little Child Eats—So Will He Grow" reviews the food needs of the preschool child and gives suggestions for preparing the little child's food. Physicians and nurses have found it useful to mothers and others caring for young children. The material was approved by the Child Welfare Committee of the Michigan State Medical Society.

Physicians may obtain copies of the leaflets from the local health departments or from the Section of Nutrition, Michigan Department of Health.

* * *

Classes for expectant parents are growing in popularity and the Maternal and Child Health Section of the Department reports an "unprecedented" demand for them. A recent survey shows that forty-four sets of classes are being held in thirty-one communities in the state. New classes are being added each month.

* * *

Grace Eldering, Sc.D., is now chief of the Western Michigan Section of the Laboratories in Grand Rapids and an Associate Director of the Division. She succeeds Pearl Kendrick, Sc.D., who has resigned to devote full time to teaching at the University of Michigan where she is Resident Lecturer in the School of Public Health, teaching laboratory practice in the Department of Epidemiology.

Dr. Eldering was assistant to Dr. Kendrick for many years and also served in the Lansing and Powers Laboratories.

* * *

Harold Bishop has been appointed acting director of the Eaton County Health Department to serve until a full-time director is appointed.

In Memoriam

CHARLES D. AARON, M.D., of Detroit, died December 3, 1951, at the age of 85.

Dr. Aaron was graduated from the University of Buffalo School of Medicine in 1891. He later studied at the Universities of Berlin, Giessen, Vienna, Wurzburg, Paris, London and Heidelberg.

Dr. Aaron was senior house physician and surgeon at Harper Hospital, after his arrival in Detroit in 1891. He was city physician of Detroit from 1893 to 1895. A specialist in gastroenterology, he was certified by the American Board of Internal Medicine.

Dr. Aaron was a member of the Wayne County Medical Society and a Fellow of the American College of Physicians.

WILLIAM F. ACKER, M.D., of Monroe, died November 9, 1951, at the age of seventy-two.

Doctor Acker served the city of Monroe for the last forty-eight years as a general practitioner. He was graduated from the Detroit College of Medicine in 1901 and interned at Harper Hospital, Detroit. Later he was chief of interns on the staff of Harper Hospital before entering general practice in Monroe in 1903 where he also served as county and city physician. He was chief of staff at Mercy Hospital, Monroe, 1935-1936.

Dr. Acker was honored at the 86th Annual Session of the Michigan State Medical Society in September, 1951, by membership in the "Fifty-Year Club."

During World War I, Dr. Acker was a captain in the Medical Corps.

Dr. Acker is survived by his wife, Marie; a daughter, Mrs. David E. Collier, of Tokyo, Japan; a son, Robert, a chief hospital corpsman at Mare Island, Vallejo, California, and three grandchildren.

CHARLES C. BILODEAU, M.D., of Kalamazoo, died December 5, 1951, at the age of forty-one.

For the past year, he had practiced medicine and surgery in Kalamazoo. Previous to that, Dr. Bilodeau had practiced in the East after receiving his medical degree in 1936 at Columbia University College of Physicians and Surgeons in New York City.

Dr. Bilodeau was a member of the Kalamazoo Academy of Medicine and the Kiwanis Club.

He is survived by his wife, Dorothy; two children, Harrison and Cynthia, of Springfield, Massachusetts; and two brothers, George, of Maine, and Francis, of New Jersey.

VANNY H. DUMOND, M.D., of Bay City, died December 4, 1951, at the age of sixty-four.

For the past thirty-eight years he served the community of Bay City as a physician and surgeon. He was graduated from the Detroit College of Medicine in 1910 and interned at Harper Hospital, Detroit.

Dr. Dumond was active in the committee work of the Michigan State Medical Society. He was a past president of the Bay-Arenac-Iosco County Medical society and on the staff at Mercy and General Hospitals, Bay City. He was a First Lieutenant in World War I.

He is survived by his wife, Florence; a brother, Walter Dummond, M.D., of Florida; three sisters, Mrs. William Campbell, of Cleveland, Mrs. D. Roy Merrill, of Detroit, and Mrs. May Graham, of Windsor, Ontario.

THOMAS N. HORAN, M.D., of Detroit, died December 1, 1951, at the age of forty-nine.

Dr. Horan was a pioneer in the use of photography in diagnosis. He was graduated from the University of Michigan Medical School in 1926 and interned and served his residency at Harper Hospital, Detroit, where he was a member of the staff during the years of his practice.

He was a diplomate of the American Board of Internal Medicine, and Assistant Professor of Clinical Medicine at Wayne University College of Medicine. He was a former resident physician at Cranbrook.

Dr. Horan was a member of the American College of Physicians, the Detroit Academy of Medicine, the Wayne County Medical Society and the Detroit Medical Club.

During World War II, Dr. Horan served as a lieutenant colonel in the Harper Hospital unit in North Africa and Italy. He was in the armed forces from 1942 to 1946.

He is survived by his wife, Elizabeth; a daughter, Rosemary; a son, James; his mother, Mrs. James Horan; and a brother, David, of Ridgewood, New Jersey.

Burial was in Woodlawn Cemetery, Detroit.

DAVID S. JICKLING, M.D., of Flint, died November 3, 1951, at Hollywood, Florida. He was seventy-five.

For the past forty-five years he served the community of Flint as a general practitioner. Previous to that, he practiced in Traverse City after his graduation from the University of Michigan Medical School in 1901.

He is survived by his wife, Adah.

JOSEPH B. KASS, M.D., of Detroit, died November 3, 1951, at the age of sixty-five.

For the past thirty-five years he practiced in Hamtramck and Detroit. Previous to that, Dr. Kass served as a medical consultant to the Mexican railroads. He was graduated from the University of Texas Medical School in 1913. He entered the medical school shortly after his arrival in the United States from Russia.

Dr. Kass was generous with contributions to charity and to such institutions and organizations as the Detroit Symphony Society, the Detroit Institute of Arts, the Metropolitan Opera Association, the University of Texas, the Academy for Jewish Research, the Jewish Publica-

(Continued on Page 242)

(Continued from Page 240)

tion Society, the Jewish Teachers Seminary, the United Hebrew Schools, the United Jewish Folk Schools and Brandeis University.

THOMAS C. MC INTYRE, M.D., of Detroit, died November 6, 1951, at the age of seventy-five.

He had practiced in Detroit for the past forty-seven years after graduating from the Detroit College of Medicine in 1904.

Besides his wife, Hattie, he is survived by two sons, Yale and Thomas, and a daughter, Mrs. Shirley Kukuk. He also leaves a sister and two grandchildren.

GEORGE C. STUCKY, M.D., of Charlotte, died November 26, 1951, at the age of sixty-two.

Dr. Stucky was director of the Eaton County Health Department for the past thirteen years and director of the Ingham County Tuberculosis Sanatorium from 1925-1938.

He was graduated from the University of Michigan Medical School in 1923, and served his internship at Ford Hospital in Detroit.

Dr. Stucky was a member of the Michigan and National Trudeau society, past president of the Michigan Health Officers association, and was a fellow of the American College of Physicians, the American Public Health association, and a former director of the National Tuberculosis Association.

Surviving are the wife, Juliette; two sons, Harry Stucky, of Dexter, and George Stucky serving with the U. S. Army in Germany, and three daughters, Mrs. Jack Foster, of Hastings, Mrs. Clark Griffin, of Ann Arbor, and Betsy, at home.

ARCHIBALD B. WICKHAM, M.D., formerly of Detroit, died October 27, 1951, at the age of seventy-five in Phoenix, Arizona.

Following his graduation from the Detroit College of Medicine in 1904, Dr. Wickham became a resident physician at the Solvay Hospital, now known as the Delray Industrial Hospital. The next year he entered general practice in Detroit. He turned to the study of diseases of the chest in 1918 and attended the Trudeau Tuberculosis School as well as Harvard Medical School. He also served in the TB division of the Detroit Department of Health. Dr. Wickham established the Eastlawn Tuberculosis Sanatorium in Northville.

Dr. Wickham was a member of the American Trudeau Society and had fellowships in the Michigan Tuberculosis Association and the American College of Chest Physicians.

He moved to Phoenix, Arizona, in 1948. He is survived by two daughters: Mrs. Harold Roehm and Mrs. Dean Davis.

Seventy per cent of brain tumors are in the supratentorial areas.

* * *

The commonest symptoms of brain tumors reported by the patient are headaches, disturbances of vision, nausea and vomiting, personality changes, seizures, unsteadiness and weakness of limbs.

FOR INFANT FEEDING

Baker's Modified Milk

PROVIDES A NUTRITIONALLY ADEQUATE* FORMULA

PROTEIN

Baker's Modified Milk supplies 3.5 to 4 grams of milk protein per kilogram of body weight per day when the total feeding is 2½ fluid ounces of normal strength dilution** per pound of body weight. The milk protein in Baker's also provides adequate amounts of all the essential amino acids.

CARBOHYDRATE

The carbohydrates in Baker's Modified Milk are lactose and dextrose. The dextrose which requires no digestion is readily assimilated. The lactose is slowly digested and absorbed. This combination of sugars is less likely to lead to digestive disturbances than if a single sugar were used. The carbohydrate content (7% at normal dilution**) provides adequate calories to spare the protein for its normal function of tissue building and repair.

FAT

The fat-carbohydrate ratio (approximately 1:2) is adequate to insure proper fat metabolism. The butter fat has been replaced by other fats containing less of the undesirable very low and very high molecular weight fatty acids. The added fats have also been selected to provide adequate amounts of the essential unsaturated fatty acids.

MINERALS

Baker's Modified Milk contains an adequate mineral content with the calcium-phosphorus ratio falling within the optimum range (1.3 to 1). Since cows milk contains only a trace of iron, sufficient iron ammonium citrate has been added to supply 7.5 milligrams of iron per quart of normal dilution.**

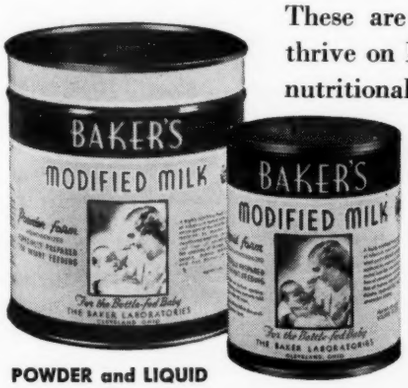
VITAMINS

Baker's Modified Milk supplies adequate amounts of all recommended vitamins except Vitamin C.

These are the reasons why infants thrive on Baker's Modified Milk—a nutritionally adequate* formula.

★

Made from Grade A Milk (U.S. Public Health Service Milk Code) which has been modified by replacement of the milk fat with vegetable and animal fats by the addition of carbohydrates, vitamins and iron.



POWDER and LIQUID

*When fed in normal quantities, provides amounts of proteins, vitamins (except C), minerals and essential unsaturated fatty acids equal to or exceeding the daily recommended allowances of The Food and Nutrition Board of the National Research Council.

**Dilute with equal parts of water.

BAKER'S MODIFIED MILK

THE BAKER LABORATORIES INC.

Main Office: Cleveland, Ohio
Plant: East Troy, Wisconsin

Division Offices: Atlanta, Dallas, Denver, Greensboro, N. C., Los Angeles, San Francisco, Seattle

ACCEPTED COUNCIL ON FOODS AND NUTRITION AMERICAN MEDICAL ASSOCIATION

. . . . . NEWS MEDICAL

President Truman's campaign for Socialized Medicine has taken a new turn with the creation of "The President's Commission on the Health Needs of the Nation," which will be financed with National Defense funds and which, significantly, has been set up to function only for a one-year period—the election year of 1952.

Mr. Truman, in an adroit political maneuver designed to make it appear that the American Medical Association acquiesced in the creation of this new propaganda agency, appointed Dr. Gunnar Gundersen of La Crosse, Wisconsin, a member of the AMA Board of Trustees, to the Commission. Dr. Gundersen, whose name was used without his consent, promptly resigned from the Commission, in a sharply worded statement which characterized the agency as "an instrument of practical politics."—National Education Campaign, January 4, 1952.

* * *

A summer camp for diabetic children will be opened for the fourth season under the auspices of The Chicago Diabetes Association, Inc., from July 1, 1952 to July 22, 1952 at Holiday Home, Lake Geneva, Wisconsin.

In addition to the regular personnel of the camp, there will be a staff of dietitians and resident physicians, trained in the care of diabetic children, furnished by The Chicago Diabetes Association.

Boys and girls, aged eight to fourteen years inclusive, will be accepted at a fee of $120.00 (which covers the three-week camping period and transportation from Chicago). Fee reductions may be arranged when considered necessary.

Doctors of Medicine are requested to notify parents of diabetic children and to supply the names of children who would like to attend camp. Applications may be obtained from, and inquiries should be addressed to: Service Unit, Chicago Diabetes Association, 110 South Dearborn Street, Chicago 3, Illinois.

Limited capacity requires prompt application.

* * *

Congress has made $82.5 million available for grants to be distributed to states on a per capita income population ratio in connection with the Hill-Burton hospital construction program.

The status of the hospital construction in Michigan, is as follows:

Completed and in operation: 18 projects at a total cost of $14,365,423 including federal contribution of $5,169,016 and supplying 943 additional beds.

Under construction: 15 projects at a total cost of $17,362,073, including federal contribution of $6,652,900 and designed to supply 1,022 additional beds.

Approved, but not yet under construction: 5 projects at total cost of $2,083,155, including $995,683 federal contribution and designed to supply 153 additional beds.

MICHIGAN INDUSTRIAL HEALTH DAY MAY 7

The program of the third Michigan Industrial Health Day, to be held at Flint on Wednesday, May 7, 1952, will be published in the March number, JMSMS. The scientific meeting will be held at Hurley Hospital, and the dinner will be featured at the Durant Hotel, Flint. For extra copies of the program write: O. J. Preston, M.D., President, Michigan Association of Industrial Physicians and Surgeons, 300 N. Chevrolet Ave., Flint, or P. J. Ochsner, M.D., Secretary, 215 Verlinden, Lansing.

* * *

Paul de Kruif, of Holland, Michigan, well known author and writer, was elected an Honorary Member of the Ottawa County (Michigan) Medical Society on December 7, 1951. The resolution presented to the County Medical Society at the time of Dr. de Kruif's election read as follows:

"WHEREAS, Dr. Paul de Kruif, a native son of Ottawa County, born in Zeeland, Michigan, has brought fame to himself and to this community by his outstanding ability as a medical writer, and

"WHEREAS, Dr. Paul de Kruif has distinguished himself for his services and attainments in medicine and the allied sciences, and

"WHEREAS, Dr. Paul de Kruif has rendered other services of unusual value to organized medicine and the medical profession, therefore be it

"RESOLVED, That Dr. Paul de Kruif be elected as an Honorary member of the Ottawa County Medical Society."

* * *

Frank C. Witter, M.D., of Detroit, was honored by the Surgical Staff of Highland Park General Hospital at a dinner held at the Detroit Golf Club on November 28. The occasion commemorated Dr. Witter's retirement as Chief of the Surgical Department of the Hospital, a position he held for thirty years.

Dr. Witter will continue in the private practice of surgery.

* * *

Ferdinand Cox, M.D., of Jackson, has been appointed to the Board of Appeals of State Selective Service, according to announcement of Colonel W. J. Myers, Lansing.

(Continued on Page 246)

Presenting

The Continental Professional Plan
OF ACCIDENT & SICKNESS INSURANCE

EFFECTIVE and OPERATING FOR

Members of your State MEDICAL PROFESSION

DESIGNED EXCLUSIVELY
By CONTINENTAL CASUALTY COMPANY
One of the Oldest and Largest Stock Casualty Companies in the World

A Few of the Many Outstanding Features

- ★ **Monthly benefits for both accident and sickness payable FROM FIRST DAY — Minimum claim 7 days.**
- ★ **Pays monthly benefits for disability resulting from "accidental bodily injury": —the term "accidental means" is NOT used.**
- ★ **Pays monthly accident benefits regardless of whether disability commences within a certain specified time.**
- ★ **No automatic termination age.**
- ★ **The premium does not increase as you grow older.**
- ★ **House confinement is never required to collect full benefits.**
- ★ **Indemnities cannot be prorated because of other insurance or for performing duties of a more hazardous occupation.**
- ★ **Policies cannot be restricted by rider to exclude any disease or injury originating after date of issue.**

Renewal is guaranteed to individual active members of the profession regardless of age, so long as the premiums are paid in accordance with the terms of the contract and the plan continues in effect for the members in your designated territory.

The Continental Casualty Company pioneered in the writing of Professional Association Insurance plans. The first such plan, written in 1923, is still in effect and the Company has never cancelled or declined to renew a Professional Plan because of unfavorable loss experience.

NOW available to all eligible members in active practice and under 69 years of age. Plans A or B available to female members under age 65.

SICKNESS BENEFITS	PLAN AA	PLAN A	PLAN B
PAYS.. A Monthly Indemnity for total disability during first year, whether house confined or not, ...**From First Day**	**$ 300.**	**$ 200.**	**$ 100.**
PAYS.. Total Monthly Indemnity First 2 Years...	**5400.**	**3600.**	**1800.**
ACCIDENT BENEFITS			
PAYS.. A Monthly Indemnity for total disability during first year .....**From First Day**	**300.**	**200.**	**100.**
PAYS.. Total Monthly Indemnity First 2 Years...	**5400.**	**3600.**	**1800.**
PAYS.. Monthly Indemnity for partial disability up to 13 weeks .....**From First Day**	**120.**	**80.**	**40.**

The Cost is Low

	PLAN AA	PLAN A	PLAN B
Annual	$138.00	$92.00	$46.00
Semi-Annual	69.50	46.50	23.50

ADD $5.00 TO FIRST PREMIUM ONLY

OPTIONAL BENEFITS	PLAN AA	PLAN A	PLAN B
Monthly Hospital Indemnity may be added up to ..... for $6.00 per $100 .... Hospital Benefits payable for One to 90 days — Each disability.	**$ 450.**	**$ 300.**	**$ 150.**
Accidental Death and Dismemberment Indemnity up to.. Added for $2.00 per $1000.	**7500.**	**5000.**	**2500.**

CONTINENTAL CASUALTY CO.
PROFESSIONAL DEPARTMENT, Intermediate Division
30 EAST ADAMS STREET — CHICAGO 3, ILLINOIS

(Continued from Page 244)

Partial Reimbursement for Collecting Dues—All component county and district societies of Michigan may retain as a dues collection fee a sum equal to 1 per cent of the MSMS and of the AMA dues which are collected in the year 1952 (i.e. 1 per cent of $70.00, if both the MSMS and AMA dues are certified, or 1 per cent of $45.00 if only the MSMS dues are certified).

* * *

Income tax deduction for expenses incurred in taking postgraduate courses.—The AMA has initiated correspondence with the U. S. Bureau of Internal Revenue regarding a review of the 1921 ruling which denied deductions to doctors of medicine for expenses incurred in taking postgraduate courses. A report to our membership in JMSMS will be made from time to time as the matter progresses.

* * *

Selection of Michigan's Foremost Family Physician.—Notification was given by the Michigan State Medical Society to the Secretaries of all component county and district societies of Michigan on January 7, 1952, that county societies have the privilege of nominating a doctor of medicine for this top honor among Michigan's medical men and women. The deadline for nomination of candidates for "Michigan's Foremost Family Physician" is May 15, 1952. Nominees are to be certified to the MSMS Council, P.O. Box 636, Lansing.

* * *

R. S. Sykes, D.D.S.

The Sykes Lecture, established in 1948 through a grant from R. S. Sykes, D.D.S., of Muir, Michigan, annually presents outstanding authorities to discuss diagnosis of tumors. The first lecture was given by Frederick A. Coller, M.D., Professor of Surgery, University of Michigan Medical School, Harry S. N. Greene, M.D., Professor of Pathology, Yale University School of Medicine, delivered the second (1949) lecture; William Lewis Brosius, M.D., of Detroit, gave the 1950 lecture, and Evarts A. Graham, M.D., of St. Louis, Missouri, gave the 1951 lecture.

Lauren V. Ackerman, M.D., Professor of Surgical Pathology and Pathology, Washington University School of Medicine, St. Louis, Missouri, will deliver the fifth Sykes Lecture, a feature of the 1952 Michigan Clinical Institute. This year's lecture is scheduled for Thursday noon, March 13, 1952, in the English Room of the Sheraton-Cadillac Hotel, Detroit.

* * *

The American College of Physicians announces a postgraduate course in Internal Medicine, to be held at the University of Michigan Medical School, Ann Arbor, April 14-18, 1952, under the directorship of Cyrus C. Sturgis, M.D. Maximum registration is sixty; fees for ACP members, $30.00 and for non-members $60.00. This course has been arranged for the week preceding the 33rd Annual Session of the College at Cleveland. For full information, write E. R. Loveland, Executive Secretary, 4200 Pine St., Philadelphia 4; for hotel accommodations write Michigan Union, Mr. Frank C. Kuenzel, Manager, Ann Arbor.

* * *

The American Academy of General Practice will hold its 1952 scientific assembly in Atlantic City, March 24-27, according to Mac F. Cahal, Executive Secretary, Kansas City, Missouri. The question of "Problem Drinking" will be featured in a symposium; also on the program will be a discussion of the relationship of the general practitioner and the public. Progress in Medicine will be outlined by six outstanding authorities. Other subjects covered will be obstetrics, anemia, and orthopedics.

All sessions of the Assembly, including the banquet and the scientific and technical exhibits, will be held in the Atlantic City Convention Hall.

* * *

The Fifth Annual Postgraduate Course in Diseases of the Chest sponsored by the Council on Postgraduate Medical Education and the Pennsylvania Chapter of the American College of Chest Physicians and the Laennec Society of Philadelphia, will be presented at the Warwick Hotel, Philadelphia, Pennsylvania, March 24-28, 1952.

A program covering the entire field of heart and lung disease is being arranged. Dr. Chevalier L. Jackson, Philadelphia, President of the American College of Chest Physicians, is chairman of the postgraduate course committee.

Physicians interested in attending the postgraduate course are invited to communicate with the Executive Offices, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

* * *

"Formula for Freedom" nights are being scheduled during the months of January, February and March by many Michigan county medical societies. Magnificent co-operation has been received in response to the offer of the MSMS to supply speakers who would introduce and explain the 1952 MSMS Public Relations plan to county medical society members.

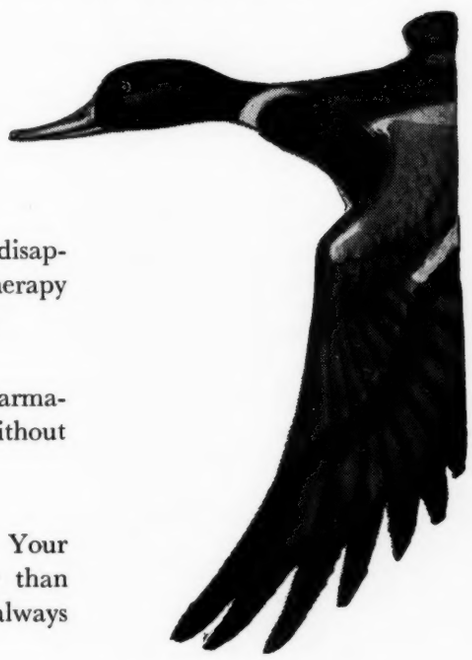
As of press time, the following schedule had been developed:

Kalamazoo Academy of Medicine, Kalamazoo, December 18, 1951
Kent County, Grand Rapids, January 15, 1952
Saginaw County, Saginaw, January 22, 1952
Mecosta, Osceola, Lake Counties, Big Rapids, February 5, 1952
Shiawassee County, Owosso, February 12, 1952
Clinton County, (combined with Shiawassee County)
Washtenaw County, Ann Arbor, February 14, 1952
Muskegon County, Muskegon, February 15, 1952
Gratiot-Isabella-Clare, Mt. Pleasant, February 19, 1952
Sanilac County, (combined with St. Clair County)
Calhoun County, Battle Creek, March 4, 1952
St. Clair County, Port Huron, March 18, 1952
Bay-Arenac-Iosco Counties, Bay City, March 19, 1952
Genesee County, Flint, April 22, 1952

(Continued on Page 248)

"THERE'S ALWAYS A

Leader . . . . . MALLARD, INC."



And you, Doctor, are always right . . . .

Inevitably, one day or another, a pharmaceutical disappoints you. Perhaps it isn't exactly right for the therapy you planned. Or, results may not meet your needs.

At Mallard we feel that only *you* can know if a pharmaceutical satisfies. It it doesn't—we want it back without question or cost to you.

It is gratifying that you so seldom make returns. Your consistent satisfaction for 41 years speaks louder than words of Mallard quality . . . and you, Doctor, are always right.

Most sincerely,

Karl O. Mallard

Karl O. Mallard
President, Mallard, Inc.

MALLARD
INC.
DETROIT 16, MICHIGAN

(Continued from Page 246)

Several invitations have been extended by county medical societies of the Upper Peninsula and plans are being considered in an attempt to co-ordinate these into a series of meetings or a single large meeting in order to present the best possible program to all doctors of medicine in that area.

At the meeting of the Kalamazoo Academy of Medicine members of the Woman's Auxiliary and many guests were in attendance to hear a program under the chairmanship of President-elect R. J. Hubbell, M.D., Kalamazoo; MSMS President Otto O. Beck, M.D., of Birmingham outlined the Beaumont Memorial Restoration. MSMS Secretary L. Fernald Foster, M.D., of Bay City, State Treasurer D. Hale Brake of Lansing, and MSMS Public Relations Counsel Hugh W. Brenneman of Lansing developed the administrative outline and policy of the Formula for Freedom.

Arrangements for the program in Kent County included Senator Carlton H. Morris, Kalamazoo, Dr. Foster and Mr. Brenneman presenting similar addresses to those at Kalamazoo. In succeeding programs, various officers of the MSMS plus state officials will participate.

* * *

Single AMA membership level proposed at Los Angeles Clinical Session. The elevation of all AMA members to fellowship status to achieve a single membership classification within the Association was proposed in a resolution submitted by Louis A. Buie, M.D., Rochester, Minnesota, chairman of the AMA's Standing Committee on Constitution and By-Laws. This would eliminate present "Member" and "Fellow" levels. The resolution must lie over until June, 1952, for final action. The Kentucky delegation introduced a resolution that any AMA member who had not paid AMA dues in 1950 or before be permitted to join the AMA without penalty upon payment of 1951 dues. The House approved a substitute version, however, giving the secretary of the AMA authority to negotiate with each state society as to means of correcting misunderstandings relative to 1950 dues. At the same time the AMA is to make further efforts to clarify membership status and publicize this information to the profession.

* * *

The AMA Board of Trustees authorized another $500,000 contribution to the American Medical Education Foundation for unrestricted use by the nation's medical schools. The Foundation was started one year ago by an AMA donation of the same size. About $250,000 has been collected by solicitation of U. S. physicians, considerably short of the million dollar goal.

* * *

The AMA will spend $250,000 on its national education campaign during 1952, with Whitaker-Baxter being retained on a part-time basis.

* * *

Internships discussed by AMA: A proposal that any plans for approval of internships include quota assignments based on a survey of facilities for adequate training, and bearing a relation to the number of students graduated and applying for internships, was referred to

the AMA's advisory committee on internships which is expected to complete a study of the matter in about a year.

* * *

Hospital Accreditation.—The six AMA representatives who will serve on the Joint Commission for the accreditation of hospitals in the United States and Canada are: Gunnar Gundersen, M.D., LaCrosse, Wisconsin; Dwight H. Murray, M.D., Napa, California; Julian P. Price, M.D., Florence, South Carolina; Stanley R. Truman, M.D., Oakland, California; Herman G. Weiskotten, M.D., Syracuse, New York, and Rolland J. Whitacre, M.D., East Cleveland, Ohio.

The Canadian Medical Association representative is: E. K. Lyon, M.D., Leamington, Ontario. Other Associations having representation on the Joint Commission are the American Hospital Association (6), the American College of Surgeons (3), the American College of Physicians (3) and the Canadian member of the American Hospital Association (1).

* * *

The National Society for Crippled Children and Adults (Easter Seals) will hold its 1952 convention at the Fairmont Hotel, San Francisco, October 25-30.

* * *

Facts About AMA Dues for 1952

1. American Medical Association membership dues for 1952 are $25.00.
2. Fellowship dues for 1952 have been abolished.
3. American Medical Association membership dues are levied on "active" members of the Association. A member of a constituent association who holds the degree of Doctor of Medicine or Bachelor of Medicine and is entitled to exercise the rights of active membership in his constituent association, including the right to vote and hold office as determined by his constituent association, and has paid his American Medical Association dues, subject to the provisions of the By-Laws, is an "active" member of the Association.
4. American Medical Association membership dues are payable through the component county medical society or the constituent state or territorial medical association, depending on the method adopted locally.
5. Commissioned medical officers of the United States Army, the United States Navy, the United States Air Force or the United States Public Health Service, who have been nominated by the Surgeons General of the respective services, and the permanent medical officers of the Veterans Administration and the Indian Service, who have been nominated by their Chief Medical Directors, may become Service Fellows on approval of the Judicial Council. Service Fellows need not be members of the component county or constituent state or territorial associations or the American Medical Association. They do not receive any publication of the American Medical Association except by personal subscription. If a local medical society regulation permits, a Service Fellow may elect to become an active member of a component and constituent association and the American Medical Association, in which case he would pay the same membership dues as any other active member and receive a subscription to *The Journal of the American Medical Association.*

6. An active member of the American Medical Association may be excused from the payment of American Medical Association membership dues when it is deemed advisable by the Board of Trustees, provided that he is partially or wholly excused from the payment of dues by his component society and constituent association.

The following may be excused in accordance with this provision: (a) members for whom the payment of dues would constitute a financial hardship as determined by their local medical societies; (b) members in actual training but not more than five years after graduation from medical school; (c) members who have retired from active practice; (d) members who have reached the age of 70, on request, and starting January 1 following the 70th birthday, and (e) members who are called to active duty with the armed forces (exemption begins July 1 or January 1 following entrance on active duty). The last two categories are excused from AMA dues regardless of local dues exemptions.

7. Active members of the American Medical Association are not excused from the payment of American Medical Association membership dues by virtue of their classification by their local societies as "honorary" members or because they are excused from the payment of local and state dues. Active members may be excused from the payment of American Medical Association membership dues only under the provision described in Paragraph 6 above.

8. American Medical Association membership dues include subscription to *The Journal of the American Medical Association*. Active members of the Association who are excused from the payment of dues will not receive *The Journal* except by personal subscription at the regular subscription rate of $15.00 a year.

9. Members may substitute one of the special journals published by the Association for *The Journal* to which they are entitled as members.

10. A member of the American Medical Association who joins the Association on or after July 1 will pay membership dues for that year of $12.50 instead of the full $25.00 membership dues.

11. An active member is delinquent if his dues are not paid by June 1 of the year for which dues are prescribed and shall forfeit his active membership in the American Medical Association if he fails to pay the delinquent dues within thirty days after the notice of his delinquency has been mailed by the Secretary of the American Medical Association to his last known address.

12. Members of the American Medical Association who have been dropped from the Membership Roll for nonpayment of annual dues cannot be reinstated until such indebtedness has been discharged.

13. The apportionment of delegates from each constituent association shall be one delegate for each thousand (1,000), or fraction thereof, **active members of the American Medical Association** as recorded in the office of the Secretary of the American Medical Association on December 1 of each year.

* * *

Frank C. Witter, M.D., retiring after thirty years as chief of surgery at Highland Park General Hospital, was recently honored at a dinner given by his colleagues at

the Detroit Golf Club. He will continue in private practice.

A graduate of the University of Michigan medical school in 1906, Dr. Witter started practice as chief surgeon at Lockwood Hospital, Petoskey. He came to Detroit in 1918 as a surgeon at Harper Hospital and an instructor at the Detroit College of Medicine.

A charter member of several honorary societies, Dr. Witter was named to the Detroit Medical Hall of Fame in 1933.

* * *

Michigan Authors

John M. Sheldon, M.D., of the Allergy Section of the Department of Internal Medicine, spoke on "Modern Concepts in the Management of Bronchial Asthma," at the Forty-fifth Annual Meeting of the Southern Medical Association at Dallas, Texas, November 5 through 8.

James L. Wilson, M.D., of the Department of Pediatrics and Communicable Diseases, took part in a symposium on "The Physiology and Disturbances of Respiration in Children," at the American Academy of Pediatrics which met October 20 to 25 in Toronto. Dr. Wilson also participated in a seminar on "Diagnosis and Treatment of Bulbar and Respiratory Complications in Poliomyelitis," sponsored by the National Foundation for Infantile Paralysis at the American Academy.

R. W. Waggoner, M.D., of the Neuropsychiatric Institute, conducted a symposium on "The Sexual Psychopath" at the Third Annual Mental Hospital Institute at

Louisville, Kentucky, October 15 and 16. On October 19 and 20, Dr. Waggoner attended the meeting of the Central Neuropsychiatric Association at Minneapolis, at which time he was elected President of the Association for 1951-52. Next year's meeting will be held in Nashville, Tennessee.

Reed O. Dingman, M.D., Oral Surgeon in the University Hospital, addressed the American Society of Plastic and Reconstructive Surgery on November 1 at Colorado Springs. His subject was "Iliac Bone Cranioplasty." At the meeting of the American College of Surgeons in San Francisco, November 7, he spoke on "The Management of Fractures of the Mandible."

Carl V. Weller, M.D., of the Department of Pathology, gave the John A. MacGregor Memorial Lecture for the Faculty of Medicine of the University of Western Ontario, London, on October 12. Dr. Weller's subject was "The Causes of Cancer."

Harold F. Falls, M.D., of the Department of Ophthalmology, presented a paper entitled "Further Evidence for the Inheritance of Retinoblastoma," at the 20th annual meeting of the American Society of Human Genetics held at the University of Minnesota, September 10-12, 1951.

Samuel J. Levin, M.D., F.A.C.A., and Selma S. Moss, M.D., F.A.C.A., of Detroit, are authors of an article, "Repository Penicillin Injections in Allergic Children," published in *Annals of Allergy,* July-August, 1951.

E. H. Steffensen, M.D., and **J. Kekara, O.T.,** of Detroit, are authors of a paper, "ACTH, Intermedin and Cortisone in the Treatment of Retinitis Pigmentosa," in The *American Journal of Ophthalmology,* December 1951.

Paul Van Portfleet, M.D., and **F. Bruce Fralick, M.D.,** of Ann Arbor, are authors of an article, "The Inflammability of Plastic Eye Glass Frames," in the *American Journal of Ophthalmology,* December, 1951.

R. Glenn Smith, M.D., and **Miles Gullickson, M.D.,** Rockford, Illinois, and **Darrell A. Campbell, M.D.,** of Ann Arbor, are authors of an article, "Some Limitations of Lumbar Sympathectomy in Arteriosclerosis Obliterans: Early Results in One Hundred Consecutive Cases," published in *Archives of Surgery,* January, 1952.

Fred W. Whitehouse, M.D., of Detroit, is the author of an article, "Aureomycin and Penicillin in Canicola Fever," published in *The Journal of the American Medical Association,* January 5, 1952.

"Observations on Effect of Drugs upon Intestinal Intubation" by **Meyer O. Cantor, M.D.,** and **Harold P. McGinnes, M.D.,** of Detroit, was published in the November, 1951, issue of *Gastroenterology.*

* * *

The seventh annual National Rural Health Conference will be held in the Shirley-Savoy Hotel, Denver, February 28, 29 and March 1, 1952. There will be about 700 in attendance—medical, farm, civic and agriculture education leaders. The theme will be "Help Yourself to Health." The program will include: Charley J. Smythe, M.D., Director of Graduate Education at the University of Colorado, Denver, formerly of Michigan and a fre-

quent contributor to this JOURNAL; John R. Rodger, M.D., of Bellaire, member of the Committee on Rural Medical Service of the Michigan State Medical Society; and Paul A. Miller, of Lansing, Extension Specialist of the Michigan State College.

* * *

Medical Schools get another $500,000 from AMA.—Dwight H. Murray, Napa, California, chairman of the Board of Trustees, announced at the opening session of the House that the AMA was contributing another half million dollars to the American Medical Education Foundation, which has been raising funds within the medical profession during the last year for the unrestricted use of the nation's medical schools.

The Foundation was founded at the meeting of the AMA in Cleveland in December, 1950, at which time the Board of Trustees announced an appropriation of a half million dollars as the nucleus of a fund to be raised by the medical profession to assist medical schools. In addition, the AMA is underwriting the total expenses involved in raising the funds.

Approximately $640,000 has been turned over to the schools so far.

* * *

Proceedings of the House of Delegates have been published in *The Journal of the AMA*. Scores of resolutions were introduced and the House and the reference committees handled the load of work in fine fashion.

The Board of Trustees recommended to the House a substitute report for adoption in place of the previous reports on hospitals and the practice of medicine (the Hess Report). The House in turn adopted the report without a dissenting vote.

This substitute report was entitled "Guides for Conduct of Physicians in Relationships With Institutions." It retained the principles enunciated in the former reports, but with certain deletions and additions designed to clarify the situation. Copies of the substitute report were distributed to members of the House.

Other actions taken by the House included:

A resolution protesting against "the promulgation of any regulation by the Selective Service System under which students of chiropractic may be deferred under the Universal Military Training and Service Act of 1951."

A resolution clarifying House action last June which called for a congressional investigation of the teaching of "collectivism in our schools."

A resolution calling for a comprehensive survey by the AMA to determine the sources of funds, both public and private, now available for medical research.

A resolution authorizing the Board of Trustees to appoint a special committee to handle the complex problem of medical care for war veterans.

A resolution authorizing the AMA to make a survey to determine the number of "deaths of small children and infants resulting from the ingestion of household products not labeled as poisonous."

Approval of a report by the AMA Council on Medical Service which outlined plans to assist state medical associations in developing programs designed to bring physicians into communities in need of medical services.

Approval of the Board of Trustees' appointment of six

AMA representatives who will serve on the joint commission for the accreditation of hospitals in the United States and Canada. The six are: Rolland J. Whitacre, M.D., East Cleveland, Ohio; Herman G. Weiskotten, M.D., Syracuse, N. Y.; Julian P. Price, M.D., Florence, S. C.; Dwight H. Murray, M.D., Napa, Calif.; Gunnar Gundersen, M.D., La Crosse, Wis., and Stanley R. Truman, M.D., Oakland, Calif.

* * *

Thirty doctors' wives are notaries public now.

Purpose: To administer the loyalty oath to a couple of thousand physicians on whom the burden will fall if Detroit is hit by an A-bomb.

William Brinkman, Office of Civilian Defense, pointed out that all civilian defense workers must take the oath before getting the ID (identification) cards.

The wives are led by Mrs. Claire L. Straith and Mrs. T. Grover Ames. Well aware of the amount of moving around that doctors do, the wives will try to reach as many as possible by stationing teams of women at each hospital in Wayne County.

* * *

E. Dwight Barnett, M.D., of Detroit, left December 28, 1951, to assume his new duties as Director of the Institute of Administrative Medicine at Columbia University. Dr. Barnett came to Michigan as assistant to Stewart Hamilton, M.D., Director of Harper Hospital, and upon Dr. Hamilton's death was made Director. He also succeeded Dr. Hamilton as a member of the Board of the Michigan Hospital Service, and soon advanced by his outstanding ability to the presidency of the Board of MHS. Dr. Barnett was also elected to the Board of Directors of Michigan Medical Service, and has rendered invaluable service. He has been a nationally recognized leader in the field of voluntary hospital and medical service. On September 19, 1951, at the annual meeting of the American Hospital Association, he was elected to the Board of Trustees.

Columbia University in planning to establish The Institute of Administrative Medicine, offered the directorship to Dr. Barnett. Finally, he decided to accept, resigned as Director of Harper Hospital, but decided to serve out his term as president of Michigan Hospital Service. Michigan has lost a valuable physician, but Columbia University has gained an excellent administrative officer.

* * *

September State-Wide Non-Group Enrollment Campaign.—Final results of the first State-wide Direct Enrollment Campaign show that almost 90 thousand per-

(Continued on Page 256)

GENESEE COUNTY MEDICAL SOCIETY

Seventh Annual Cancer Day Program

Hurley Hospital—Flint, Michigan
Wednesday, April 9, 1952

Scientific Program
9:30 a.m.-5:00 p.m.

"The Leukemic States: Their Malignant and Non-malignant Aspects in Relation to Prognosis and Treatment"
CHARLES A. DOAN, M.D.—Dean, College of Medicine
Ohio State University, Columbus, Ohio

"Cancer Problems of Specific Interest to the Surgical Pathologist"
WILLIAM J. BOYD, M.D.—Emeritus Professor of Pathology
University of Toronto
Professor of Pathology
University of British Columbia, Vancouver, B. C.

"Cutaneous Malignancies"
PAUL A. O'LEARY, M.D.—Chief of Section on Dermatology
Mayo Clinic, Rochester, Minn.

"Recent Developments in Cancer Research"
CORNELIUS P. RHOADS, M.D.—Director
Sloan-Kettering Institute and Memorial Hospital, New York, N. Y.

One-Hour Tumor Conference
R. ARNOLD GRISWOLD, M.D.—Professor of Surgery
University of Louisville, Louisville, Ky.

sons enrolled in the Blue Cross and Blue Shield Non-Group Plans.

In addition to the enrollment in the Non-Group Plans, the Group Enrollment Department reports that the average monthly enrollment of small groups of 5 to 25 employees more than doubled during the month of September.

A few highlights of the Campaign show that as many as 10 thousand persons enrolled in one day and that the daily average for the month was almost 3 thousand persons, or more than two persons enrolling every minute of every working day. Of the total Non-Group applications received, three-fourths came from residents of the area served by participating hospitals in Detroit, Pontiac, Flint, and Mt. Clemens. Including all previous campaigns, there are almost 125 thousand persons enrolled in the Non-Group Plans. This total is divided about the same as the Michigan population figures, that is, half in the Detroit-Flint-Pontiac area and the balance in other areas throughout the state.

ENROLLMENT RESULTS BY AREA

Area	Including the Following Towns	Non-Group Members
1	Detroit - Flint - Pontiac - Mt. Clemens	64,552
2	Lansing - Jackson - Ann Arbor - Monroe	6,908
3	Battle Creek - Kalamazoo - Benton Harbor - Niles	2,472
4	Grand Rapids - Muskegon - Holland - Ludington	5,733
5	Saginaw - Bay City - Port Huron - Mt. Pleasant	4,062
6	Grayling - West Branch - Alpena - Rogers City	898
7	Manistee - Traverse City - Petoskey - Cheboygan	1,000
8	Upper Peninsula	2,128
		87,753

Future Non-Group campaigns will likely be conducted on an annual state-wide basis.

* * *

The annual meeting of the **Michigan Pathological Society** was held at the University Hospital in Ann Arbor, on December 8, 1951. In addition to the business meeting, the program consisted of a Slide Seminar on "Diagnostic Problems, Interesting and Unusual Cases." W. A. Stryker, M.D., of Wyandotte, was elected president, and James G. Christopher, M.D., of Detroit, president-elect. C. Allen Payne, M.D., of Grand Rapids, was re-elected secretary-treasurer. The next meeting is scheduled on February 9, 1952, at Henry Ford Hospital, the program to be devoted to clinical pathology.

* * *

The Second National Cancer Conference, sponsored by the American Cancer Society, National Cancer Institute and American Association for Cancer Research, will be held at the Netherland Plaza Hotel, Cincinnati, Ohio, March 3-5, 1952.

Two general sessions will be held daily at which will be discussed cancer of the lung, prostatic and bladder neoplasms, the value of chemotherapy and radiation therapy, treatment of melanoma and gastrointestinal cancer and relation of steroids to cancer production.

In addition, seven clinical panels will be devoted to cancer of the breast, head and neck, female genital tract, gastrointestinal tract, genitourinary tract, lung and lymphomas and leukemias.

Seven research panels will discuss radioblology, genetics, cytology, chemotherapy, isotopes, virology and steroid endocrinology.

No registration fee; all physicians and laymen interested are invited to attend.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

AN ATLAS OF NORMAL RADIOGRAPHIC ANATOMY. By Isadore Meschan, M.A., M.D., Professor and Head of the Department of Radiology, University of Arkansas School of Medicine, with the assistance of R. M. F. Farrer-Meschan, M.B., B.S. (Melbourne, Australia). 1044 illustrations on 362 figures. Philadelphia: W. B. Saunders Co., 1951. Price $15.00.

This new book is not just another book, but one which fills a very considerable gap that has long existed. Not many of us are good artists, and it is often impossible to convince men not trained in the field of radiology that certain shadows actually do represent a specific structure in the body. The correlation of the radiographs with good anatomical drawings is an excellent way to accomplish the teaching. This has been done in detail and the amount of care that has gone into the book is evident at first glance.

Every one in medicine should benefit from careful study of the sections of this book which pertain to their particular field.

The physical aspects of the book are done in the usual manner of Saunders' books. Need more be said?

G. T. P.

SURGICAL PRACTICE OF THE LAHEY CLINIC. By members of the Staff of Lahey Clinic, Boston. 784 illustrations on 509 figures. Philadelphia: W. B. Saunders Co., 1951. Price $15.00.

This book is a revision of the original volume published ten years ago. It brings up to date the cumulative surgical experience of the staff of the Lahey Clinic. Emphasis is placed on standardized operative procedures. Although one may object to this method of presentation it does have great value when used for the training of young surgeons. This book is heartily recommended to all surgeons. Without it, no surgical library would be complete.

J. W. H.

THE SPECIALTIES IN GENERAL PRACTICE. Edited by Russell L. Cecil, M.D., Professor of Clinical Medicine, Emeritus, Cornell University Medical College, New York City. Articles by: William A. Barnes, M.D.; Douglas D. Bond, M.D.; Charles G. Child, III, M.D.; R. Cannon Eley, M.D.; John M. Flumerfelt, M.D.; Edmund P. Fowler, Jr., M.D.; Louis M. Hellman, M.D.; Charles H. Herndon, M.D.; Chevalier L. Jackson, M.D.; Hugh J. Jewett, M.D.; George M. Lewis, M.D.; R. Townley Paton, M.D.; Arthur W. Proetz, M.D., and L. Ramsay Straub, M.D. Philadelphia: W. B. Saunders Co., 1951. Price $14.50.

Dr. Cecil as editor of this volume has assembled very satisfactory treatises on the various specialties with which the general practitioner comes most in contact. There are fourteen well-known collaborators, several in some fields. The first three chapters are minor surgery, orthopedic surgery, and fractures and dislocations. Next fol-

low urology, diseases of the anus and rectum, gynecology, obstetrics and pediatrics. These are ably presented, well illustrated and occupy 491 of the 818 pages. Ophthalmology, diseases of the nose and throat, diseases of the larynx, bronchi and esophagus, and otology are extremely well presented in the next 140 pages. There is an abundance of illustrations, and some special subjects of extra importance such as blindness from glaucoma, cataract, get special consideration. Incidentally, Townley Paton, in his article on ophthalmology, speaks of two ionometers, and gives the American instrument, the McLean, a good boost. Many writers ignore that instrument in favor of the Schitz which is not a direct reading affair. Two chapters on dermatology and syphilis, and psychiatry, complete the book. A sixty-page detailed index is a real asset to the book.

KEY TO MEDICAL TERMINOLOGY, Unit One. By Queena Hazelton. Second edition. Dallas, Texas: American Association of Certified Medical Secretaries, 1951.

This is a supplemental text in medical word-combining forms for medical secretaries, medical record librarians, nurses, corpsmen, and premedical students.

Professional nomenclature is made easy for the average high school graduate in the Intensive Exercises giving pronunciation and also shorthand outlines for the difficult terms used in the solid matter drilling the word-combining forms listed at the beginning.

Difficult words are given special treatment, to make them intelligible, and shorthand symbols are suggested. This little book is part of a course of training.

UNTOWARD REACTIONS OF CORTISONE AND ACTH. By Vincent J. Derbes, M.D., F.A.C.P. Associate Professor of Medicine, Tulane University of Louisiana School of Medicine; Head of Department of Allergy, Ochsner Clinic; Visiting Physician, Charity Hospital of Louisiana at New Orleans; and Staff Member, Foundation Hospital, New Orleans, Louisiana, and Thomas E. Weiss, M.D., Instructor in Medicine, Tulane University of Louisiana School of Medicine; Member of Department of Medicine, Ochsner Clinic; Visiting Physician, Charity Hospital of Louisiana at New Orleans; and Staff Member, Foundation Hospital, New Orleans, Louisiana. Springfield, Illinois: Charles C Thomas, 1951. Price $2.25.

This attractive little soft leather covered book contains a good chapter on the physiology of the drugs. Administration causes structural changes in some of the organs of internal secretion also leading to a chapter. Actions on the cardiovascular system and in infections are mentioned. Changes in the musculoskeletal system and in skin, subcutaneous and mucous parts are considered. Probably the most important part of the book is a long list of references, including J. W. Conn of Michigan University in the *Journal of Clinical Endocrinology,* 10: 825, 1950; O'Donnell, W.M. and Fajans, S.S. in *University of Michigan Medical Bulletin,* 16:169-172, 1950.

STATISTICS FOR MEDICAL STUDENTS and Investigators in the Clinical and Biological Sciences. By Frederick J. Moore, M.D., Associate Professor of Experimental Medicine, University of Southern California School of Medicine and Frank B. Cramer, B.A., Research Fellow, and Robert G. Knowles, M.S., Research Associate Department of Experimental Medicine, University of South California School of Medicine. Philadelphia: The Blakiston Co., 1951. Price $3.25.

The science of statistics is a growth from mathematics, and calculus. It is an attempt to find reason and rhythm from a mass of figures and facts which of themselves are baffling. There is a science to the matter, and this book is an exposition of the application of the science to medical studies and research. Five stages of the study are covered: (1) several articles on variation and the normal curve of error; (2) fitting the normal curve of error to the data; (3) sampling distributions and tests of significance; (4) the problem of non-normal distributions; and (5) general aspects of the design of experiments and presentation of results. The appendix devotes twenty pages to tables and formulae used in statistical calculations. For a student doing experimentation and analyzing results, this book should be a great help.

CLINICAL ALLERGY. A Practical Guide to Diagnosis and Treatment. By Samuel J. Taub, M.D., F.A.C.P., Professor of Medicine and Chairman of the Department of Allergic Diseases, the Chicago Medical School; Professor of Medicine Cook County Graduate School; Attending Physician Cook County, Columbus and Mt. Sinai Hospitals. Second edition, revised and reset. New York: Paul B. Hoeber, Inc., 1951. Price $4.50.

This author has given us a very readable treatise on Allergy. His style is pleasing, easy to read, and entertaining at times. The publishers have done an excellent job, too, in that the book is well printed with good type, adequately spaced for easy reading, and on non-glossy paper. Such a book one can enjoy. In the chapter on asthma, the author says bronchial asthma is a misnomer. He credits John Foyer, an English physician, with a "Treatise on Asthma," in 1698, in which he described his own symptoms. He described two types, one a continual asthma, and one he called idiopathic and suggested its cause as "the constriction of the bronchi and bladders of the lungs by windy spirits." Status asthmaticus is the cause of most asthma deaths. About three pages are devoted to its consideration and treatment, including Cortisone, which gives good results. Disturbances of the skin due to allergy, drug allergies, blood transfusion, allergic reactions, serum sickness, and miscellaneous conditions are reviewed. We like the book.

THE BATTLE FOR MENTAL HEALTH. By James Clark Moloney, M.D. New York: Philosophical Library. Price $3.50.

The author has presented his views in a cloth-bound booklet of less than 100 pages. He is of the opinion that we are a nation of emotionally unstable people. To corroborate his beliefs, he has included statistics on the number of cases, cost and care of the psychotics, psychoneurotics, alcoholics, drug addicts and criminals that help to make up our population. As a charter member of the Cornelian Corner organization for infant mental hygiene, he strongly favors their beliefs, consisting of: less maternal fear of pregnancy, breast feeding, obstetrical rooming-in care, permissive child rearing and the promotion of relaxation in mothers to further mental health. All these problems should be of interest to physicians and especially obstetricians and pediatricians. Also possibly hospital administrators and obstetrical nurses should find it thought provoking. And if the Cornelian Corner group should have the method to avoid the instability and maladjustment that are making up a large proportion of our population, then we should all be interested.

G. K. S.

PENICILLIN DECADE, 1941-1951. Sensitizations and Toxicities. By Lawrence Weld Smith, M.D., Medical Director, Commercial Solvents Corporation; Ann Dolan Walker, R.N., former editor, *Trained Nurse and Hospital Review*. Washington, D. C.: Arundel Press Inc., 1951. Price $2.50.

This is a book of small articles occupying sometimes a page, sometimes more, about sensitizations and toxicities of penicillin as observed during the ten-year period just ending. These include urticaria, contact dermatitis, allergic reactions, serum sickness, anaphylaxis, exfoliative dermatitis, and a long list of kindred reactions or manifestations. Following the text is a list of 342 papers and references.

ANTIBIOTIC THERAPY. By Henry Welch, Ph.D. Director, Division of Antibiotics, Food and Drug Administration, Federal Security Agency of the United States Government, and Charles N. Lewis, M.D., Medical Officer, Division of Antibiotics, Food and Drug Administration, Federal Security Agency of the United States Government, foreword by Chester S. Keefer, M.D., Wade Professor of Medicine, Boston University School of Medicine, Chairman Committee on Medicine and Chairman, Committee on Chemotherapy of the National Research Council. Washington, D. C.: The Arundel Press, Inc., 1951. Price $10.00.

In the past ten years, the treatment of infectious diseases has been so completely changed by the advent of the antibiotics that any new and complete summary of the information now available is welcome and should be of distinct value to the student and the busy physician. The amount of information that is available is tremendous and to present this in a concise, though reasonably complete form, has been a herculean task. Prior to this text, there has been no single volume encompassing the whole field of the available antibiotics. If for no other reason, this fact should make the book of marked importance.

The first part deals with the isolation and development of the antibiotics. The second part deals with each antibiotic individually, including antimicrobial spectrum, pharmacology and dosage forms. At the start of each chapter there is a photograph and biographical sketch of the discoverer of that particular antibiotic. This is especially well done. The antibiotics covered are as follows: Tyrothricin, Penicillin, Streptomycin and Dehydrostreptomycin, Bacitracin, Aureomycin, Chloramphenicol, Terramycin, Polymyxin, Neomycin, Mycomycin, Viomycin, and Subtilin. The third and last part discusses the treatment of specific diseases and in most instances recommended dosages are given. Also, the use of the various antibiotics in these individual diseases is summarized. This makes this text of particular value in quick reference for specific therapy. At the end of each chapter an adequate bibliography is appended.

As is readily seen, there is a tremendous amount of information in this book, and we believe it represents an excellent summary of the properties and uses of the antibiotics as of today. Since the treatment and prevention of infectious diseases comprise a large portion of the practice of medicine, then the active practitioner will find great help in this worthwhile text.

G. W. S.

LEO H. BARTEMEIER, M.D.

(Continued from Page 234)

that under the serious mask of this busy man, there lies a love of fun and an adventurous spirit. He used to fish but of late has turned to stamp collecting, gardening, and taking pictures—really good pictures, movies and stills. He ties these hobbies in with a collector's appreciation of art and literature. When Bart is taking pictures, nothing else is important: he trails behind sightseeing groups; he is always the last one to board the bus; he stops his guide on the most dangerous curve on the mountain for "just one shot of this view," keeping his family in a constant state of jitters!

He enjoys laboring in the garden. His own yard is beautiful—the envy of all neighbors who, of course, join in enjoying it. There are bird feeders in the yard—which Bart keeps filled; one is outside his study window and the red birds come each year for the feed they know is waiting for them.

Because of the many meetings he has attended, he has a valuable collection of stamps. In his travels as President of the International Psychoanalytic Association, as a member of a commissioned group sent by the Surgeon General of the United States to study combat exhaustion in the European Theatre in World War II, as a consultant for the World Health Organization, as a member of the Executive Board for the World Federation for Mental Health, he has made contacts with stamp dealers in Europe and has friends all over the world who know of his hobby and who are trading with him or buying for him.

Bart hasn't many gray hairs on his head. Perhaps that is due to the joy he has in his work and the great love and care that daily come his way from a close-knit family composed of an admiring wife (who has been ministering to his wants for thirty years) and two fine daughters—not to mention the light of his life—grandbaby Ann.

Bart used to say he would retire at fifty-five. Wife Bess says proudly, with a slightly wistful note: "I used to believe him. He is now fifty-seven and has no intention of even slowing down."

Bart, good doctor, we salute you!

Classified Advertising

$2.50 per insertion of fifty words or less, with an additional five cents per word in excess of fifty

APPROVED RESIDENCY IN GENERAL PRACTICE: St. Luke's Hospital, Saginaw, Michigan. 140 adult bed capacity, has an opening for two resident physicians in General Practice, approved by the American Medical Association. Salary $300-$350 per month with partial maintenance. Mail communications to Olive E. Lebold, R.N., Superintendent, St. Luke's Hospital, Saginaw, Michigan.

FOR SALE: One slightly used Bausch & Lomb microscope. Excellent condition. Original cost $500.00; will sacrifice at $250.00. Will ship for inspection. Contact: C. D. Woodcock, M.D., 249 Blackman, Clinton, Indiana.

WANTED: Physician with some psychiatric experience, at State Hospital; $8,000 and family maintenance. Apply Superintendent, State Hospital, Madison, Indiana.

WANTED: Young, draft-exempt doctor as full partner. General practice including surgery and obstetrics. Simultaneous surgical training in own Detroit hospital. Guarantee monthly take-home $1,000.00 plus. Other inducements. Reply: Box 4, 606 Townsend Street, Lansing 15, Michigan.

FOR SALE: General Practice should gross $30,000, with surgery first year. New ground floor office-clinic, fully equipped. Located on Lake Huron; excellent hunting and fishing. Modern home available, if desired. Rich farming area. Reply: Box 2, 606 Townsend Street, Lansing 15, Michigan.

FOR SALE: Due to death, a well-established Detroit General Practice, grossing $20,000 yearly. Excellent location on ground floor with physiotherapy equipment. Arthur B. Scheel, Administrator, 14550 Mark Twain Avenue, Detroit 27, Michigan.

WANTED: Physician for modern industrial medical department. Large Detroit corporation. Full time. Steady. Give particulars in first letter. Reply: Box 3, 606 Townsend Street, Lansing 15, Michigan.

TECHNICIAN CAPABLE OF MANAGING medical laboratory and x-ray department. Opportunity for advancement. Position available immediately. Woods Medical Center, 19635 Mack Avenue, Grosse Pointe Woods 30, Michigan.